Lands and Peoples

THE WORLD IN COLOR

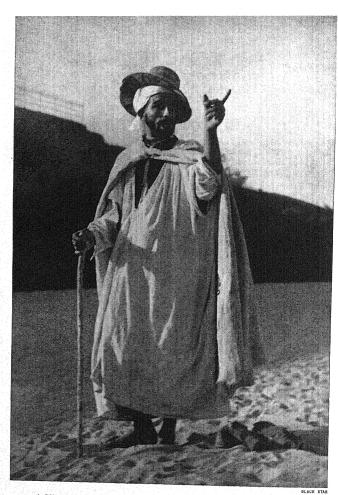


VOLUME V

THE GROLIER SOCIETY

NEW YORK

TORONTO



A BERBER FROM THE REMOTE ATLAS HIGHLANDS OF MOROCCO

A robed tribesman from the Atlas Mountains makes a strong point in what appears to be a heated argument. The Berbers are a proud people, fiercely jealous of their freedom.

MOROCCO AND THE MOORS

A Glimpse of the Most Western Land of Islam

Known in the Arab world as "The Farthest West," Morocco sprawls over the Atlas Mountains between the Strait of Gibraltar and the western Sahara. In the Middle Ages it was a stronghold of the Moors who ruled over Spain. During this time and until the early nineteenth century, Morocco was one of the Barbary States, whose pirates were the terror of the Mediterranean. It finally came under European control and in 1012 was divided into three zones—the French, the Spanish and the International Zone of Tangier. The sultan of Morocco retains his title but has little actual power. Today, especially in French Morocco, there is a strong desire for complete independence.

ESS than two hundred years ago few travelers from the West had ever been to North Africa, and those who did go seldom returned to their native shores, for many of the seaports were the haunts of pirates and slave-traders, who liked nothing so much as the sight of a becalmed and heavily laden merchantman.

They were good seamen were these Corsairs and drove their long-oared galleys, rowed by slaves of all nations, even as far as the coasts of England, where they would land and attack some unfortunate Cornish hamlet at night, dragging off the inhabitants to hopeless slavery.

The lands along the coast of North Africa, whence these pirates came, were then known as the Barbary States from the original inhabitants, the Berbers who have probably existed there since the Stone Age. The Berbers, who are black in color but are really members of the white race whose skin has tanned and darkened through exposure to countless ages of African sun, were cut off from conquest to the south or from intermingling with the black race of Central and South Africa by the vast Sahara Desert, more impassable than any sea.

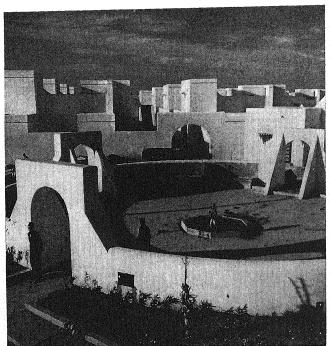
Walling off this "land of the Berbers" still more effectively is the snow-clad Atlas Mountain range, divided into the Great, Middle and Little Atlas, which stretches along the edge of the Sahara from Morocco in the west to Tunisia in the east. It was the sight of their great heights, lost in the clouds, that caused the Greek sailors to say that here Atlas was holding the world on his shoulders and the name has remained to this day.

The fertile, coastal strip was easily accessible, however, from the Mediterranean which washed its shores on the north and brought traders and conquerers alike. The Phoenicians and the Greeks came; the Romans established colonies; there were invasions of the Vandals, but the Berbers seemed little affected by the contact with other peoples.

In the seventh century came the Arabs enforcing Mohammedanism as they conquered even into the most inaccessible region, "The Farthest West," which came to be known as Morocco, and its inhabitants Moors, though this name only rightfully belongs to those who have Arab and Berber blood in their veins. The Moors became great conquerors. Their great military period was in the eighth century, when they sailed across the Strait of Gibraltar and seized upon the southern half of Spain. There, in Andalusia, they flourished for hundreds of years. At last they were driven from Spanish soil in the fifteenth century.

Morocco retained its independence for many centuries under various dynasties. It is still nominally independent; but to all practical purposes it has been divided up between France and Spain, which have set up protectorates. French Morocco continued to be governed by French colonial officials after the fall of France in World War II. In November, 1942, it was occupied by the Allies, and became a strong Allied base. The French Zone of Morocco is now governed by a resident

Morocco, like its Moorish inhabitants, is highly inconsistent. During the few



FRENCH EMBASSY-INFORMATION DIVISION

MORE HOMES FOR A BUSY AFRICAN CITY

Casablanca, a seaport on the Atlantic coast, is French Morocco's largest city and one of the most important ports of North Africa. Although it was founded in 1468 by the Portuguese, it is today a modern city. In this new housing development, the architects have adopted a style of architecture well suited to the hot weather and merciless sun of Africa.

weeks of spring, the land is a paradise of wild flowers and birds, but by July most of Morocco is once more a scorched and barren waste.

Though bitterness has often marked the relations of Morocco with the industrial and trading nations of Europe, there have been periods of co-operation that brought rewards to both sides. Railways and motor roads, irrigation systems and modern sections in the large cities attest to the hard work and technical ability of Europe.

peans and Moroccans alike. In the city of Casablanca the old and new rub shoulders. Camels and motor cars, Moors and French officers mix together in the wide streets and before the great hotels. Over the new white and yellow houses shines the fierce African sun, and behind is the tumbling Atlantic where the harbor bristles with the masts of ships.

Casablanca is the new Morocco; Marrakesh may be taken as an example of the old. It is an inland city built in a

MONOCCO AND THE MOORS

large oasis of palms, and behind it loom the great snow-clad peaks of the vast Atlas regions—the mountainous backbone of Morocco. The French military road to Marrakesh runs across desert where nothing grows and where the heat is intense. An occasional motor car flies past strings of laden camels which grimace as if in disgust.

The ancient rose-red walls of Marrakesh are seven miles around; from their ten gateways once marched the armies

that carried fire and sword into Spain. Though a garage here and there shows the growth of European ideas of transport, the town is much the same as it was centuries ago.

In the streets, gray-eyed Berbers, in their cloaks of woven goats' hair, woolly haired men from the Sudan, Negro slaves, Jews and wild-looking nomad Arabs jostle together, for Marrakesh is a great center of the trading caravans, and here may be heard a hundred strange lan-



THE SULTAN'S GUARD LEADS THE WAY

At the head of a parade, the royal guard of the Sultan of Morocco passes under a triumphal arch in the old section of Rabat, the capital of French Morocco. The city is an important seaport on the Atlantic coast and it is here that the Sultan spends much of his time, in his palace southwest of the town. From the sea the 180-foot minaret of the Hasan Tower is visible.

guages. Camels and mules press through the crowds of gaping sightseers, merchants and beggars. Snake-charmers play on wooden flutes and allow their reptiles to bite their hands. As the serpents' poison glands have been removed, this is not so dangerous as it looks. Cake-sellers and venders of water and fruit cry their wares, and Negro jugglers and acrobats do their utmost to attract the people.

Cities That Are Truly Eastern

Here, as a living reproach to the memory of some bygone governor, stands an old Negro whose eyes have been put out for theft. He pleads monotonously for alms and he does not go unrewarded. The crowd is a mass of color, and the gaudy cloaks and scarves, yellow silks, silver girdles and gay turbans are dazzling to eyes that are accustomed only to the more sombrely dressed crowds in our country.

Marrakesh, once the capital of the old Moorish empire which included Spain, Tunis and the Sudan, is now only a shadow of its old self, but the Moors do not regret the departure of its glory. Under the shadow of its crumbling palaces and mosques, they quote their old proverb: "When a thing becomes perfect it soon fades." "What is to be will be," say the Moors and leave the magnificent, old buildings to decay, or to be restored by the French.

Fez, another old capital, also shows the old glory of Morocco. Here there are still holy men and story-tellers, mosques and shrines which no infidel may enter. The walls and ramparts are immense, and the town itself is a gigantic maze of minarets, green-tiled roofs and great Saracenic archways. Nowadays, the sultan usually resides at the coast city of Rabat.

A Glimpse of a Moorish Palace

Bou Jeloud is one such palace hidden away and seemingly forgotten. Its courtyards are set with Moorish fountains, and there are gardens within its walls where fig trees, roses and enormous masses of geraniums bloom in a setting of fairy-like, Moorish architecture, with its wealth of colored tiles and carved cedar wood

and its elaborate geometrical designs in

The Moors are very superstitious. Some years ago a half-witted man in Fez used to remain in prayer for weeks at a time. This, added to his madness, which, in the East, is always taken as a sign of holiness, caused him to be regarded as a saint. He was thought too holy to be seen by common people, and a shrine was built for him wherein candles are kept burning night and day.

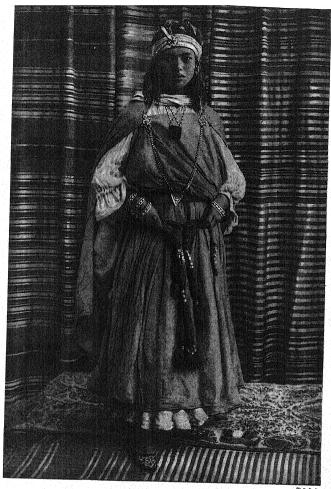
Though most people think of the Moors as one people, they are really composed of several distinct races. First, we have the true Arab, the descendant of the fierce Mohammedans from Arabia who conquered North Africa centuries ago. He inhabits the plains and the great towns. The Berher, who lives in the hills and may be gray-eyed and fair in coloring, is the original inhabitant of the country. The Rifs who fought so long against Spain and France are of this race. Negroes there are in plenty.

In all the coastal towns there are many Jews. Most are the descendants of those who left Spain when Moorish power waned in that country. Others trace their roots to Jewish migrations of pre-Christian times. In Morocco, Jews have been forced to live as second-class citizens in overcrowded, ghettolike sections called mellehs. Most Moroccan Jews have few legal or property rights and their poverty is extreme. In an effort to better their lot, considerable numbers have migrated, since 1948, to the Jewish state of Israel, in Palestine.

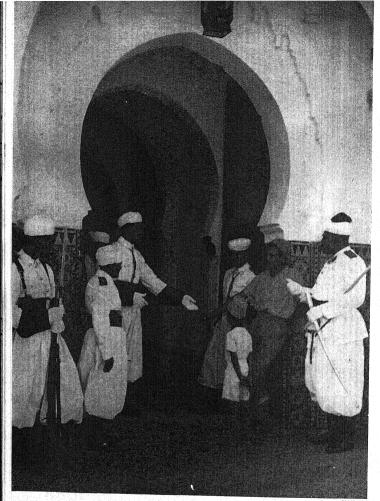
In Spanish Morocco

Besides French Morocco and the Tangier Zone, which came under Spanish rule in 1940 and reverted to international control in 1945, there is Spanish Morocco. This is a much smaller protectorate, mountainous and sparsely settled by several tribes of Berbers. They are pastoral people, that is to say, they depend chiefly on their cattle, sheep and goats for food and clothing.

This mountainous district, which is north of the Atlas region, is known as



MOORISH WOMEN of the higher classes, according to Mohammedan tradition, are kept in strict seclusion. They are not allowed to leave their homes unless their faces are veiled and unless they cover themselves with a cloak that reaches almost to the ground. The houses are built with flat roofs where the women may sit and chat in the cool of the evening.



BRIGHTLY UNIFORMED GUARDS AT THE KHALIFA'S PALACE, TETUAN Moorish arches, like giant keyholes, span the entrance way of the Khalifa's Palace. The guards wear uniforms of dazzling white to protect them from the penetrating rays of the sun.



EWING GALLOWAY

STRAW-THATCHED HUTS MARK A BERBER VILLAGE IN MOROCCO

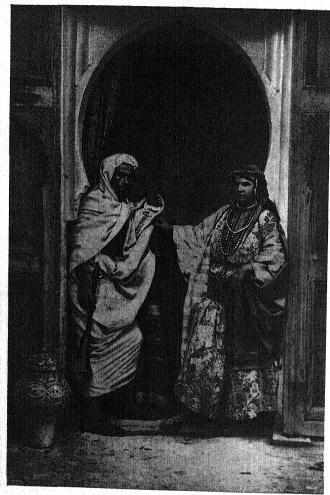
Some Berbers live in villages of stone houses and maintain their own mines, flour mills and olive presses. But others farm with primitive implements and live in straw-roofed sod huts.



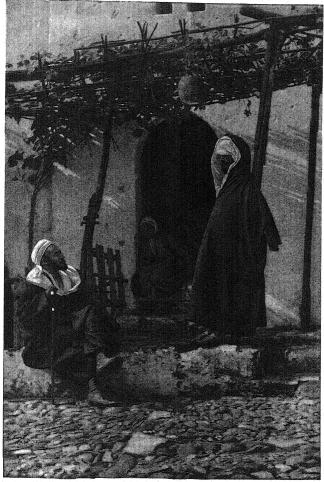
BLACK STAR

VEGETABLE SELLERS ARRANGING WARES IN THE MARKET PLACE

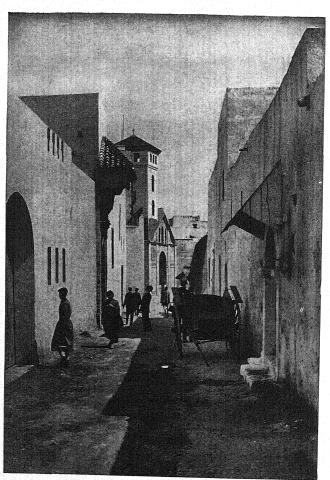
The international zone of Tangier attracts many visitors. One of its most colorful quarters is the market place. Fruit vendors cry their wares, and snake charmers play reeds.



IN A MOORISH DOORWAY, a minstrel of Morocco and his wife relax at the end of the day. Her colorful costume—bright silks, brocade and beads—the rich tapestries, the archway and the vase in the left foreground remind us of the fine decorative taste of the Moors. Their architecture alone has given the Moors a high place in the world of art.



ON A NEIGHBORLY CALL, the bearded gentleman with the cane interrupts a stroll through cobbled streets to sit and talk with a friend. The loose robes protect their wearers against the blaze of the sun and the harsh blast of arid winds. The sun, a great artist, colors everything in North Africa: the walls, yellow and pink; complexions, a ruddy tan.



"BLIND" HOUSES ON A STREET IN MAZAGAN, MOROCCO

The street is hardly more than an alley, without sidewalks and poorly paved. From it one would hardly guess that the town is a port on the Atlantic Ocean, a little distance southwest of Casablanca, important chiefly for the export of agricultural products from the fertile region of Doukkala. Mazagan was founded by the Portuguese in 1502.



CITY OF SNOW-CAPPED MOUNTAINS AND TROPICAL PALMS

Marrakech, southern capital and largest city of Morocco, lies in the shadow of the snow-covered Atlas Mountains. Part of the city wall shows in the foreground. The Mosque of Koutoubia, with its lofty tower rising at the left, is considered the most beautiful structure in the city. It is also known as the Mosque of the Scribes and dates back to the twelfth century.

the Rif, and the inhabitants are great fighters. Physically these Rifs, or Riffs, are a much finer race than the true Moors, and many of them are red-haired and gray-eyed. To account for this, some learned men say that the Rifs are descended from Scandinavians who landed in Africa in the twelfth century.

There may be some truth in this theory of a common ancestry with the Caucasian race; for the Rifs, though fierce, have not the Oriental ferocity of the other Moors but are warlike in a genial, hearty way, like the old German robber barons, or

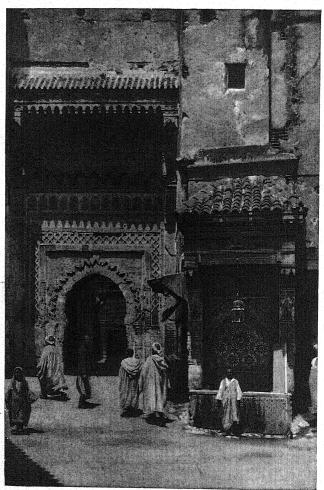
the early Saxons.

It is not surprising that these fighting races resented the Spanish occupation of their lands, and, at various times revolts started among certain tribes. An indecisive guerrilla warfare was carried on till 1921, when the Rifs captured 20,000 Spanish troops with all their artillery, transport and ammunition. This is known in history as the Melilla disaster.

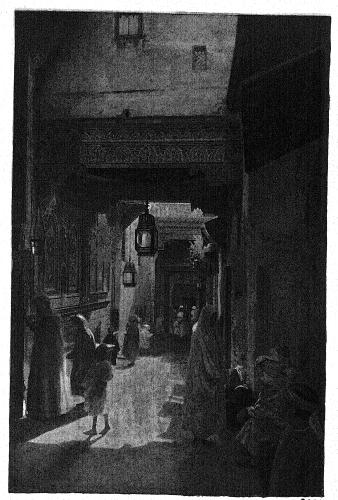
Abd-el-Krim, the leader of the Rifs, reorganized his army on modern lines, and then attacked the Spaniards vigorously. For a time he was successful, and the courage of the Rifs and the fanatical bravery of their allies (who regarded the campaign as a Jehad or Holy War) prevailed against the armies of Spain. Nevertheless, Spain, unwilling to lose the last vestige of her empire, refused to withdraw from the struggle.

Unfortunately for Abd-el-Krim, some of his allies made raids into the French protectorate. With Spain he could deal, but to challenge the greatest military power then in Europe was another thing. From the day France entered the war, Rif independence was doomed. Airplanes, tanks and heavy artillery proved too much for the tribesmen, and after a long and desperate war with the two European powers, Abd-el-Krim surrendered to the French in 1026.

For many years, affairs ran smoothly in French Morocco. Apparently the French were better able to gauge the temperament of the Moors, and they governed with a mixture of firmness and tact. When the great market place in Fez was destroyed by fire, Marshal Lyautey, the resident-general, caused a replica to be built, complete with all the shrines of Moslem saints.



THE CARPENTER'S FOUNTAIN in Fez shows the architectural skill of the old Moors, a skill their descendants do not seem to possess. The city gave its name "fez" to a certain kind of cap, which was originally made there and which is worn in some Mohammedan countries. Fez, the northern capital of Morocco, is divided into two portions by the River Pearl.



FEZ, A HOLY CITY of Islam, contains the shrine that we see here. It is that of Mulai Edris II, the founder of the city, and no infidel may set foot therein. Within the city walls are mosques and palaces and gardens, and the university, though formerly much larger, is famous as a centre for the study of the Mohammedan religion and law.

Like the Romans, who once occupied these regions, the French regarded roads as a great civilizing influence. mean communication, and communication means the exchange of ideas. When the roads were constructed in 1016, the Moors would descend at night and destroy them. but the French doubled the guards and the work went on. Saleh, Rabat, Marrakech and all the other big towns are linked by excellent roads, and hundreds of miles of railways stretch across the sands.

Under French rule, Morocco developed rapidly save only in the lesser known Atlas regions where the great Berber feudal lords held sway.

As the twentieth century entered its second half, however, the temper of the people was changing. The strong spirit of nationalism that was sweeping Asia had spread to Africa, too, and the French were having their troubles. Skirmishes took place between Arab demonstrators and the French police and militia, and some blood was shed. Morocco supported Tunisia in her appeal to the UN for independence, and by 1952 French Morocco was also agitating for home rule.

MOROCCO: FACTS AND FIGURES

THE COUNTRY

Lies on the northwest coast of Africa; bounded on the north by the Mediterranean, on the east by Algeria, on the south (indefinitely) by the Sahara and on the west by the Atlantic. gier International Zone (area, 225 square miles; population, about 125,000 with 17,000 Europeans); the northern zone, a Spanish protectorate (area, 18,000 square miles: population, about 1,140,000); the remainder, a French protectorate (area, 161,500 square miles; population, 8,225,-000). Other Spanish possessions: Ifni, enclosed by the French Zone (area, 675 square miles; population, 42,000); Southern Protectorate (area, 19,036; population, 12,000); Saguia el Hamra (area, 31,652; population, 11,000); Rio de Oro (area, 71,564; population, 25,000).

GOVERNMENT

The French Zone is a French protectorate, dating from April 1912. The sultan is religious primate and chief-of-state under advice of the French Resident-General. Administration is in the hands of the French and a native organization. Local administration is in the hands of native pashas and French controllers. The Spanish Zone is under the control of the Spanish High Commissioner and a Calipha who is chosen by the sultan from 2 candidates amed by the Spanish government. Tangier became by statute of 1923, which came into force in 1925, a neutral and demilitarized zone with an autonomous government. Legislative power was placed in the hands of an international assembly, the president of which was a native representative of the sultan. International ad-ministration of the Tangier Zone, allowed to lapse during Spanish occupation in World War II, was restored in 1945.

COMMERCE AND INDUSTRIES

French Zone-Agriculture is the most important industry, but is carried on by natives using primitive methods. Principal crops are cereals, beans, chickpeas, canary seed, olives, vines, fruits and almonds; considerable forests of cork, cedar, arar, argan and oak. Gums are produced. Phosphate is the principal mineral,

Fishing and livestock-raising are important. Miscellaneous industries include flour mills, breweries, soap, candle factories, cement factories. The exports are phosphates, cereals, preserved fish, ores, fruits and other livestock and agricultural products; imports are sugar, petroleum products and machinery.

Spanish Zone—Agriculture of most primitive

fashion is the chief industry; iron ore is mined; tunny fishing is important. Exports are iron ore, goatskins, canned and dried fish and esparto grass; imports are flour, semolina, refined sugar,

tea, seed oils and wines.

Tangier International Zone-The chief industries are cigarette-making and fishing. Exports are skins, eggs and tinned fish; imports are flour, sugar, candles, fabrics, tobacco, coffee and

COMMUNICATIONS

Railways: French Zone, 1,184 miles; Spanish Zone, 58 miles; and Tangier, 11 miles. Motor roads: French Zone, 7,447 miles; Spanish Zone, French Zone, 7,447 intes. Spanist Zone, 540 miles; and Tangier, 65 miles. Nine air lines serve the French Zone. Length of tele graph lines in the French Zone, 11,044 miles with connections to cities in the Spanish Zone. Telephone line mileage in French Zone, 103,847.

RELIGION AND EDUCATION

Mohammedans of the Sunni sect predominate; the Jewish population numbers more than 200, ooo. Illiteracy is widespread. In the French Zone, Moslem and state schools of primary, secondary and higher levels have an enrollment of about 238,344. There are state and Hispano-Arabic schools in the Spanish Zone. In Tangier, schools under French and Spanish protectorate governments supplement Jewish and Moslem schools

CHIEF TOWNS

French Zone-Rabat (French capital and principal residence of the sultan), population, 161,600; Casablanca, 569,500; Marrakech, 239,-200; Fez, 202,000; Meknes, 162,400. Spanish Zone—Tettan (capital), 93,658. Tangier International Zone—Tangier, 60,000.

FROM SENEGAL TO SOMALILAND

France's Overseas Negro Territories in Africa

France's Arab and Moorish peoples in Africa are treated in other articles, as are Madagascar, Réunion and Mayotte. This article deals chiefly with those French overseas territories where the population is predominantly Nagro. It includes a fringe of small coast holdings reaching into the interior, which varies from the aridity of the world's greatest desert to the dense forests of an equatorial belt where the rainfall is excessive. The heat and disease-bearing insects make it unhealthful for white men who are unaccustomed to such climate. The Belgian Congo is discussed in the article In the Heart of Africa. French West Africa, which lies between French Equatorial Africa and the Sahara, comprises Senegal, Mauretania, French Sudan, French Guinea, Ivory Coast, Dahomey, Niger and Upper Volta. The population is Negro, Hamitic (of Caucasian origin) and mixed, with the usual scattering of Europeans. Then, in our trek across the continent, we come to French Somaliland on the east coast.

AFRICA has been the scene of the most extensive French overseas expansion, which began as early as 1365 when the Norman sea-faring folk of Dieppe explored the west coast of the dark continent, establishing trading sta-

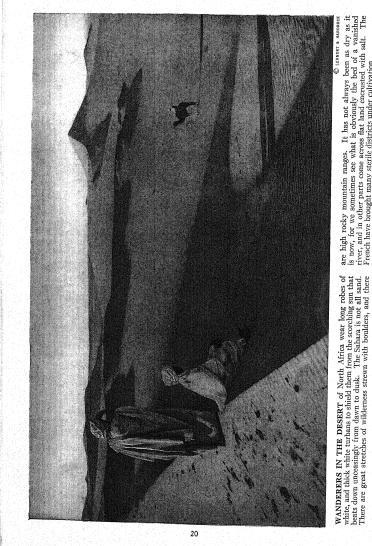
tions in Senegal and Guinea. These ex-peditions were not backed by national support, although they enriched a dozen ship-owners these practically founded the French marine. mercantile For a period the foothold in Senegal was lost, but had been recovered by 1637, and the nineteenth century saw considerable further expansion. At the end of the first World War. France made some gains where Germany had lost. Other articles deal with the Arab and Moorish peoples of French North Africa, which, sepa-rated by desert and mountains, is Mediterranean rather than African in its geography. Another article treats of Madagascar, with Mayotte and Réunion islands off its coast. This one will include French Somaliland on the east coast, the Sahara (mentioned in another

volume as one of the world's great waste lands), and in particular. French West Africa, was once known as French Sudan. When France drafted a new constitution in 1946, this area acquired the status of an overseas territory. It consists of eight small territories including Senegal, French Sudan. Niger, Upper Volta, Mauretania and the narrow coastal territories of French Guinea and the Ivory Coast, and also Dahomey which squares off a corner of Niger. The chapter will deal, too, with French Equatorial Africa. This was known until 1910 as

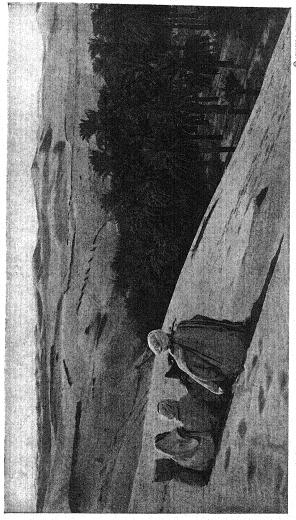


RIVAL FOR MEDUSA

This native of Ubangi-Shari (French Equatorial Africa) in his war paint and headdress of spears is no less fearful a sight than Medusa, who could turn men to stone.



are high rocky mountain ranges. It has not always been as dry as it is now, for we sometimes see what is obviously the bed of a vanished river, and in other parts come across flat land encrusted with salt. The French have brought many sterile districts under cultivation.



AN OASIS IN THE SAHARA seems like paradise to one who has seen nothing but stretches of burning, silfiting sand off ord ays. Sometimes, when reconsing these desert sands, a traveler sees a pool of water ruffled by the wind. This may be only a "mirage," or false picture, caused by the sand

giving heat to the adjacent layers of air. This air be subservation and possesses different properties of reflection than the cooler air above. This trick miror may cause a far-eway oblet to appear nearby, a scene to be upside-down or an image to seem double.

French Congo, a country not unlike the Belgian Congo described in In the Heart of Africa. The large block known as the Cameroons is a UN trusteeship under French and British supervision. In general this vast territory, shown on the man that follows, is an area too hot for white men. Either it presents the rockstrewn aridity of much of the Sahara, or the excessive wetness of the dense, vine-strangled forests to the south. There are but few hill regions so numerous in British Africa; yet it is populated, in places densely, by black tribes whose heavily pigmented skins protect them from the sun's ferocity.

Railways were late in coming to Africa, and some regions are as vet hundreds of miles from a rail line. There are hardsurface motor roads, but they, too, are scarce and poor in the interior. Long the principal means of travel in all of Africa, camel caravans are still important. Water travel has also been widespread, as central Africa has a generous share of long, navigable rivers. Air flights from Europe into Dakar and other important cities and towns are now regular occurrences, and airfields have been increasing in number throughout the territories. It is, therefore, rather simple to get a swift bird's-eye view of the continent.

The Rifts of Central Africa

As we fly over central Africa, we see below us the thick, tangled jungles that have made the airfield-builder's task so difficult. Moving on to the east we cross above two great Rift Valleys, cracks in the land mass filled with lakes and waterways from Lake Nyasa to the Nile and to the Red Sea. There are massive highlands through East and South Africa, and high country across Cameroon and northern Nigeria, but the Congo Basin lies in a great depression and the Sahara is in places (where it was once inundated) actually below sea level. Yet even this vast desert has the Ahaggar (Hoggar) Mountains, rising south of Algeria to as much as eight thousand feet and extending into the naked Tibesti or Tu Highlands, which in past ages formed a bridge across the sands and stony wastes by which animals migrated from north to south. West Africa, however, has few mountains, though the Futa Jallon form the watershed of the Niger, the Senegal, the Gambia and other important rivers, and the Bauchi Plateau, Africa's great tin area, rises in northern Nigeria and Cameroon. The climate, so near the equator, varies rather in the amount of rainfall and the sharp change from noon to night rather than by seasons.

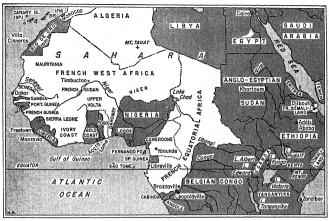
Oases and Camel Caravans

If we have flown from, say, Morocco across the Sahara, our first surprise will be to find, amid the stony red expanses and the white seas of sand dunes, occasional oases, green with date-palms, and inhabited by villagers, who offer succor to camel caravans en route to Timbuctoo and elsewhere. The oases are strung along the depressions where water rises to the surface, and these determine the great trade routes. A notable example of land reclamation is the Niger irrigation scheme of the French Sudan, which has turned the inland delta of the river into a productive cotton- and rice-farming area.

France controls most of the Sahara. some of which is still unexplored. That it has been in the main waterless for centuries is evident from the Arab name "Sahira," which itself means "desert." Yet ancient dry watercourses indicate that the region may not always have been so desolate as it is today. While the major portion of the French Sahara is rocky, in the western part there is sand which often piles up into dunes a thousand feet high; and when the swift hot winds come sweeping along, they carry this sand in clouds. burying the thorny dwarf plants-until another sandstorm shall uncover themand stifling men and caravan animals.

Timbuctoo of Desperate Deeds

In the southern part of this desert not far from the Niger lies Timbuctoo (Timbuktu), a Negro town of mud walls and dwellings that was an important center of caravan routes from Morocco and Guinea.



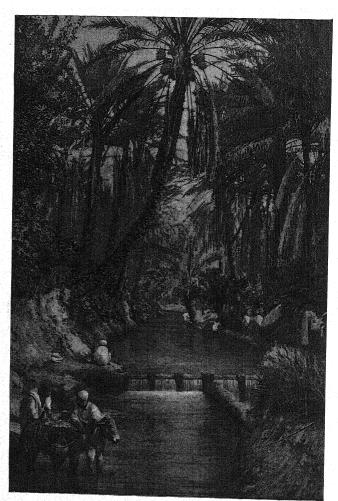
FRENCH AFRICA FROM THE ATLANTIC TO THE RED SEA

Though less important today with the decline of the caravan trade, it is accessible by two motor routes. It can also be reached from the coast by a railway from Dakar to Koulikoro, from whence a steamboat service runs to Timbuctoo seven months a year. The Negroes here are of different stock from the Bantus south of the Cameroons, though both are primitive.

In the eleventh century the Tuaregs, a nomadic people of Berber origin, occupied Timbuctoo, and left a long record behind them of oppression and slavery, robbery and desperate deeds. Now there lived along the Upper Niger a Sultan Samory, a slave-raider who had formed a brigand empire and sold probably a million and a half Negro captives to the Tuaregs in exchange for gold, ivory and cattle. These Negro slaves were called black ivory, and as the region abounded in the big-eared African elephants, there was much slaughtering of these beasts for their tusks of white ivory, and processions of naked slaves used to be sent to market carrying these tusks upon their shoulders. In 1880 a French captain of the marines, Joseph Simon Galliéni (the same who distinguished himself in World War I), was captured by Sultan

Samory and held prisoner until another French force had overcome the many ferocious small tribes of mixed Berber and Negro stock and imposed peace on the region, rescuing Timbuctoo from the rule of the Saharan Berbers. But by 1888 Galliéni had broken into Western Sudan and defeated Sultan Samory, who was, however, not captured until 1898. Timbuctoo is today a town in French Sudan, the territory in the central section of French West Africa.

Now let us view the parched and stony (and in part mountainous) wastes of the French Sudan, Circling above it, we see to the eastward a shallow great expanse gleaming like a steel mirror in a green frame. That is Lake Chad, which during the rainy season may spread to twenty thousand square miles in area, although during the dry season it shrinks to half that. Yet practically nowhere is it ever more than fifteen feet deep. The silver loops of two-thirds of the Niger River and all of the Upper Senegal lead our eye westward. These rivers grow with the rains of July to October until the Niger can accommodate small steamboats, though for five months or more it is too shallow. The lesser streams dry up, and



DATE PALMS are the chief trees of the Saharan oases, and they provide the staple food of the desert tribes. Sometimes an oasis is merely a grove of palms around a well; sometimes, when the water is supplied by a stream, it is larger and more luxuriant and fruit and grain may be grown. An oasis may include a permanent village or even a small town.

their beds become overgrown with shrubs that grow like wildfire in that equatorial climate. Anglo-Egyptian Sudan and what was formerly French Sudan (the word "Sudan" means Land of the Blacks) were for long a conquest of Turkey, which ruled it despotically through Egypt.

To turn southward for a short inspection, French merchants settled by the Gabun River above the Congo as early as 1839, and after the opening of the Belgian Congo, as described in the article In the Heart of Africa, the French secured a part of the Congo basin. Here it was that Du Chaillu discovered the gorilla. This and other parts of French Africa are amazingly rich in wild game -herds of elephants, with tusks heavy enough to employ four porters each, herds of vicious buffaloes, droves of vividly striped zebras, thick-skinned rhinoceri and clumsy hippopotami along the waterways, many varieties of the monkey tribe in the forests, herds of ostriches in the southern Sahara, to say nothing of the bright-striped zebras of the grasslands. lions, leopards, antelopes, giraffes and crocodiles.

Wild Berbers Tamed

Now if we are to continue our journey in logical order, we will fly from Timbuctoo across to the west coast of the Sahara to Mauritania, which is one of the eight territories that form French West Africa. Here live numbers of Moorish Mussulmans of Berber affiliations whose men-folk wear veils over their mouths and noses to protect them from the sand. Though caravans once feared their name, French influence under a colonial policy has been such that the natives look upon the French flag as their own. Their famous fighters have come forward in large numbers in both world wars to help their mother country against Germany-irony of fate, since it was Bismarck who had induced the French explorer, Jules Ferry, to go empire-building in Africa!

Proceeding southward along the coast to Senegal, we will find a new air base there, in the colony from which Ferry started to the Upper Niger when he claimed this valuable territory for the French. Senegal is a region of sandy soil where the natives cultivate groundnuts, corn, rice and millet. They weave and make pottery, as well as heavy jewelry of pure silver and gold, ivory and amber. There is a river service, during the rainy season, down the Senegal to the port of Dakar, one of the chief entries to French West Africa. It serves to carry the imports of the region and its exports, chiefly groundnuts (peanuts).

The Several Guinea Lands

Senegal is really the first of a series of coastal approaches (by means of either rivers or railroads) to the interior plateaus which are often called the Guinea Lands. Some of these belong to other European nations than the French: all have much the same character, whether in French Guinea, so-called, the Ivory Coast, Dahomey, Togoland, Gold Coast, Nigeria or the Cameroons. We find flat country frequently separated from the ocean by sandspit and marsh and infested by myriads of malaria-bearing mosquitoes and tsetse flies which cause sleeping sickness. The products are similar in all of these territories -groundnuts (peanuts), palm kernels and palm oils, coffee and cocoa. On the Futa Jallon plateau in the French Guinea interior, cattle-raising is an important activity. Diamonds and gold are mined in many parts of West Africa, particularly in the British territories of Sierra Leone and the Gold Coast, as the name of the latter indicates.

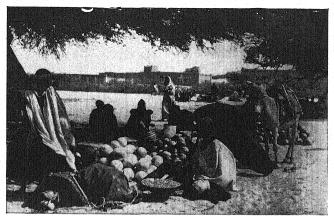
Many Enormous Swamps

All the way from the mouth of the Senegal to the mouth of the Congo, a region visited by heavy rains (at one place 390 inches in one year), there are large rivers rising in the hills and emptying into the Atlantic; and while these are at times broken by rapids, they are highways for native craft and small launches. But the coast is also characterized by mangrove swamps, and off the Bay of Biafra in the Gulf of Guinea is a colossal swamp into which more than twenty rivers discharge their silt. Here the oil-



THE HARP'S THE THING IN DJIBOUTI'S STREET ORCHESTRAS

The spectacular object in the foreground is neither a fan nor an ornate headdress. It is a native harp—standard equipment for street orchestras in the coastal town of French Somaliland.



LACK STAR

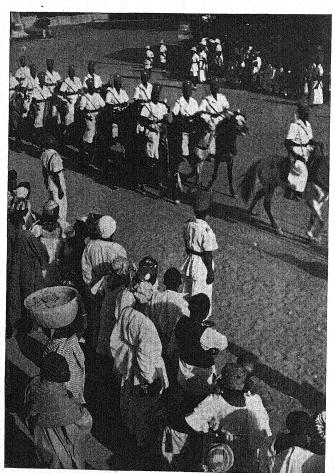
MELONS AND PEANUTS FOR SALE OUTSIDE TIMBUKTU'S WALLS
Timbuktu, in the French Sudan, was once a market for slaves and gold. The city is still a trading
center and a halting place for caravans bound across the Sahara to Algeria and Morocco.



EWING GALLOWAY

SUN-BAKED DJIBOUTI, THE CITY ON A CORAL PENINSULA

Djibouti is on the Red Sea, facing the Gulf of Aden. This is one of the hottest regions in the world. The city is a free port and is linked by rail with Addis Ababa, capital of Ethiopia.



CAVALRY TROOPS PASS IN REVIEW ALONG THE STREETS OF DAKAR

Native cavalry troops in their spotless white uniforms parade down one of the main streets of Dakar in French West Africa. A major transportation and communication center on the Atlantic Ocean, the city is famous as the entrance to France's African empire. Dakar is strategically located on the coast of Senegal at the southern tip of Cape Verde Peninsula.

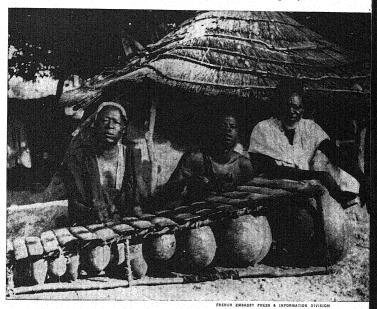
FROM SENEGAL TO SOMALILAND

palm flourishes, the coconut, palm, bamboo and rubber-bearing plants provide material for export, the extensive cultivation of cotton is a dream of the future. The forests are valuable for their mahogany, cedar, ebony and other rare trees, although these are usually linked together by lianas and difficult to lumber.

The Ivory Coast has two great lagoons connected with one another by a canal, Grand Lahou and the port of Grand Bassam, with a lagoon over one hundred miles long and twelve feet deep, with jetties built to avoid the sand-bar at the harbor entrance. This opens up a region of pineapple and cocoa plantations and wild inland mahogany forests.

Dahomey reaches inland from primeval

forest across the great Lama swamp (now crossed by rails) to the rich grasslands or savannahs, interspersed by fresh-water swamp forests, where the huts are made of grass, and palm oil is extracted for market. On an inland plateau stands Abomey, the scene of the notorious "Customs" when, annually, scores of human victims were sacrificed to the ancestral spirits, that they might serve them in the beyond. The dominant people here are the polygamous Ffon (Fons, Jejs or Jefe), Negroes of the Ewe family, an offshoot of the Bantus, ranging from chestnut to a yellowish tinge and possessed of unusual keenness as traders. The lagoon port of Whydah (Hwedah), since annexed by France, was originally Portu-



FRENCH SUDANESE play a primitive type of xylophone made of wooden bars and gourds of selected sizes. However, drums are the most popular musical instruments among Africans.



THIS PART OF THE SCHOOL DAY IS FUN

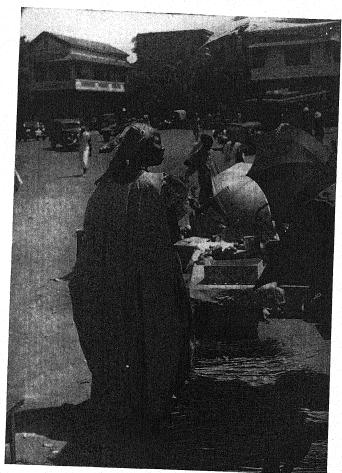
Little girls learn to sing a new song in the public school at Rufisque, a district in Senegal, one of the eight territories that make up French West Africa. Their teacher is showing them how to clap their hands in time with the singing. Although education became compulsory in 1949, inadequate school facilities can serve only a small part of the population.



PHOTOS, FRENCH EMBASSY-

CHEERFUL FISHERMEN HOPE FOR A BIG CATCH

Fishing is an important source of food for the natives in the African towns located along the Atlantic coast. These fishermen of the town of Thiès, in the territory of Senegal, are preparing their nets for the day's work. Thiès is forty miles east of Cape Vert, the most western part of Africa, where Dakar, the capital of French West Africa, is located.



FASHION DESIGN, A HIGHLY INDIVIDUALIZED AFFAIR IN DAKAR

Dakar, Senegal, is the Negro fashion center of Africa. Each woman is her own designer and brooks no dictation. Though garments vary with the woman, basically they are always long, full and flowing. Indeed, social status is measured by the amount of material that is used. Color is also important. Brilliant hues and striking contrasts are considered to be the most beautiful.

FROM SENEGAL TO SOMALILAND

guese and Portuguese names are borne by many of the natives. Here the French built the first fort in 1671, at a time when the kings of Hwedah derived vast riches from the dues levied on the export of slaves and ivory. In 1777 Whydah was conquered by the king of Dahomey because the Whydahs, who were fetish worshipers, had placed nothing but their great fetish Dahn, a carved serpent, to guard a strategic ford, and it happened that the Dahomey leader feared only his own fetish, a panther. His king, Agaja Dosu,

has been called a Tamerlane in miniature. Dahomey's neighbor, Togo, rising to hills between three and four thousand feet in altitude, smelts iron as well as cultivates

large plantations.

French Somaliland, finally, directly eastward of the Anglo-Egyptian portion of the Sudan, has hardly enough inhabitants all told to make a city, though they are a cosmopolitan assortment—Sudanese, Somali, Arabs, Ethiopians, Indians, Jews and others. There are salt mines, coast fisheries and some trade.

FRENCH AFRICA: FACTS AND FIGURES

French Somaliland and each of the 8 sections of French West Africa are Overseas Territories. Each is under a governor, a government council and an elective assembly, and each has representatives in the French Parliament and the Assembly of the French Union.

FRENCH SOMALILAND

On the Gulf of Aden, bounded by British Somaliland, Ethiopia and Eritrea. Area, 9,071 square miles; population, 55,770. Chief industry and export is salt; imports include cotton goods and cattle. Population of capital and chief town, Djibouti, 17,000.

FRENCH WEST AFRICA

Bounded on the north by Spanish Sahara, Algeria and Libya; on the east by French Equatorial Africa; on the south by Nigeria, Gulf of Guinea, Gold Coast, Liberia and Sierra Leone; and on the west by Portuguese Guinea, Gambia and the Atlantic Ocean. Area, 1,815,768 square miles; population, 16,607,000. A governor-general at Dakar is assisted by a government council and a grand council consisting of 40 delegates, 5 from each of the 8 territorial assemblies. Chief exports: peanuts, peanut oil, coffee and cocoa. Chief imports: textiles, fuel oil, machinery and foodstuffs. Railways, 2,350 miles; all-weather roads, 16,800 miles; telegraph lines, 27,080 miles; telephone lines, 11,523 miles. In 1,560 primary and secondary schools there were about 165,000 pupils.

Dahomey. Area, 44,660 square miles; population, 1,505,000. Chief products are corn, cotton, coffee and palm oil. Population of capital

ton, correct and paint on. ropulation of capital and chief town, Porto Novo, 30,800.

French Guinea. Area, 108,430 square miles; population, 2,262,000. Products include rice, palm kernels, bananas, rubber and coffee. Live-stock, 850,000 head. There are deposits of gold, diamonds, bauxite and iron ore. Population of capital and chief town, Conakry, 43,420.

French Sudan. Area, 461,270 square miles; population, 3,350,000. Products include peanuts, rice, corn, millet and cotton. Livestock, 13,350,000 head, including camels. Population of capital and chief town, Bamako, 101,650.

Ivory Coast. Area, 129,770 square miles; population, 2,064,000. Products include peanuts. coffee, cocoa, bananas, palm oils and kernels, and mahogany. Population of capital and chief

town, Abidjan, 45,730.

Mauritania. Area, 364,000 square miles; population, 522,560. Products: cattle, gum, salt and prepared fish. Livestock, including camels,

2,920,000 head.

Niger. Area, 493,690 square miles; population, 2,041,000. Products include millet, peanuts, rice and cotton. Livestock, including camels, 6,172,000 head. Population of capital and chief

6,172,000 fleat. Fopnation of capital and cinctown, Niamey, 5,750.

Senegal. Area, 81,050 square miles; population, 1,090,000. Livestock, 470,000 flead; crops peanuts, millet, corn and rice. Oceanic and river shipping is considerable. Population of chief towns: St. Louis (capital), 63,000; Dakar,

132,000; Kaolak, 33,000.

Upper Volta. Area, 121,860 square miles; population, 3,177,000. Products include corn, rice, yams, edible fats, sisal, and native manufactures. Livestock, 2,450,000 head. Population of chief towns: Ouagadougou (capital), 28,000; Bobo-Dioulasso, 52,000.

UNITED NATIONS TRUST TERRITORIES

Togo. On the Gulf of Guinea between Gold Coast and Dahomey. Area (French), 21,893 square miles; population, 999,000. Products include cocoa, cotton, coffee, corn, palm kernels and peanuts. Population of capital and chief

town, Lomé, 33,000.

Cameroun.

Bounded on east and south by Rio French Equatorial Africa, southwest by Rio Muni and west by Bight of Biafra and Nigeria. Area (French), 166,489 square miles; popula-tion, 3,009,000. Products include cocoa, palm kernels, timber and coffee. Population of capi-tal and chief town, Yaoundé, 50,000.

PORTUGUESE GUINEA

Bounded by Senegal, French Guinea and the Atlantic Ocean. Area, 13,944 square miles; population, 517,000. Products include rice, palm oil, seeds and hides. Population of capital and chief port, Bissau, 1,000.

TWIXT THE DESERT AND THE SEA

Algeria, Tunisia and Libya

The fringe of green that stretches from Gibraltar to the Nile between the Mediterranean and the Sahara is a dry land watered by scant winter rains and here and there by short streams that rise in a rim of coastal highlands. The Berbers who first settled this fringe and the desert oases beyond the hills and mountains have never had an easy time. They have been host so one invader after another. First came the Phoenicians, followed by the Romans and after them the Vandals. Next the Byzantine Empire held sway, only to be succeeded in the seventh century by the Arabs and in the sixteenth by the Ottoman Turks. From the start of Arab rule until the French gained control in the nineteenth century, Morocco, Algiers, Tunis and Tripoli were known as the Barbary States. They warred on one another and raided the fleets of Europe. Only very short periods of peace intervened, and the few natural resources were left barely touched. Within the past hundred years, especially since the end of World War II, a desire for a greater measure of national freedom has grown up in North Africa. Libya gained its independence in 1951, and French rule in Tunisia and Algeria has suffered many estbacks.

THE desert wastes of North Africa might be likened unto quicksands, for old civilizations, religions and cities have been engulfed by those fine, tawny particles that trickle through one's fingers like water. When an animal lies down to die in the desert, the wind-driven sand eddies over and about it, sometimes completely covering it and again leaving it exposed. And the sand has treated great cities and civilizations in the same way.

Nearly three thousand years ago, Phœnicians and exiles from Tyre founded the famous city of Carthage near modern Tunis. A race of merchant seamen, they united martial skill with a genius for trade. Their fleets returned laden with slaves and their caravans with gold, and their armies were recruited from every country bordering on the Mediterranean Sea. To-day, but little of their stronghold remains, and their gods, Moloch and Melkarth, are only half-forgotten names.

Out in the trackless desert, Roman cities lie buried. Their wharves are now a two days' journey from the sea, and their oil-presses are a hundred miles from the nearest olive grove. At Tingad, in central Algeria, there is a gaunt, ruined, sand-swept city which has been deserted for centuries, and broken columns are the only relies of a vanished civilization.

In the seventh century A.D. the Mohammedan conquerors swept across the Libyan Desert, through Tunisia and Algeria, and into Morocco. Carthaginians, Romans, Vandals and Byzantines—all had contributed something to the land that eventually became an Arab strong-hold. About ninety miles from Carthage, the Arabs, or Saracens, built their mysterious, forbidden city of Kairawan. Then it was that Tunis once more became the centre of culture.

Arab genius kept alight the lamp of learning, while Europe yet awaited the passing of the dark ages. The courts of the North African potentates were filled with poets and musicians, and the colleges with learned men. Then the flame died. The books of the philosophers and chemists were burned in order that the Koran might remain unquestioned, and the golden age of Arab culture passed, as other civilizations have done.

For centuries these lands were in an almost continuous state of war with one or another of the European powers, because their ports sheltered swarms of pirates and slave-traders who boldly seized merchant ships or even small war vessels, confiscating all property and holding for ransom the captives. It came about that most of the nations of Europe were paying large tribute to these Barbary States in order to be free from their piratical attacks. After the American Revolution, when the United States, no



TRANS WORLD AIRLINES

VEILED LADIES TAKE THE AIR IN CONSTANTINE

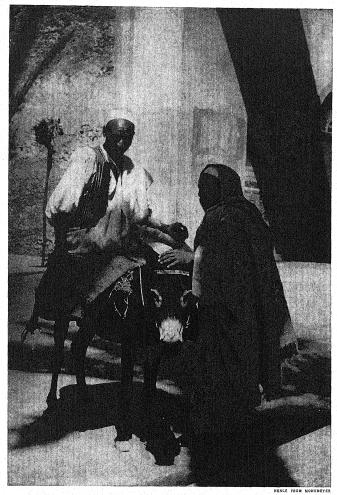
Constantine, which is southeast of Algiers, is one of the most important cities of Algeria. It was constanting, when is southeast of August, is one of the most important trues of August. It was named for the Roman Emperor, Constantine the Great, who restored it in 313 A.D., after it had been destroyed in war. A large part of the city's population is composed of Mohammedans. The native section—the cashah—can be seen beyond the bridge.



AMERICAN EXPORT LINES

THE BUSY HARBOR OF ALGIERS

Algiers, the capital of Algeria, is an interesting combination of the modern and the old. The modern part of the city, with handsome buildings and many open squares, stands on the lower slopes of the hills facing the Bay of Algiers. The older part, which is Oriental in character, is traversed by narrow, crooked streets and occupies the higher slopes.



TWO BAREFOOT CITIZENS of Tripoli, capital of Libya, pause for a chat. The Libyan people are largely Arab, Berber and Jew, though many Italians still live in the country.



WELCOME SIGHT: AN OASIS WELL IN THE HEART OF THE SAHARA
The oasis well above with its coping of gypsum is in southern Algeria. Such little desert wells are
fed by underground streams and may reach a depth of between twenty and fifty feet.

longer under the protection afforded by Great Britain's tributes, sent a fleet to force the plunderers to peaceful ways, other nations did likewise and eventually the rulers promised to reform their countries. But the old Arab genius was lacking, and another country gradually assumed control in Algeria and Tunisia.

It was the French who seized this opportunity of acquiring a vast colonial empire, and they have done much of which to be proud. Their roads and railways in Algeria and Tunisia stretch from the Moditerranean into the desert, and all North Africa, save Libya, Egypt, and a small part of Morocco, is theirs. Algeria is ruled by an appointed governor general and an elected Algerian Assembly, and it also sends representatives to the French Parliament.

Old Pirate-town of Algiers

Algeria, one of the old Barbary States, lies between Morocco and Tunisia, and its chief port and capital is Algiers, once notorious for its pirates. Algiers is an example of the renewed prosperity of North Africa. Its wharves are crowded with ships loading their cargoes of grain and tobacco; its palm-shaded streets echo with the rumbling of heavy lorries and tram-cars. Shops such as we might expect to find in Paris cater to wealthy citizens, and merchants and tourists of all nationalities may be found in its palatial hotels.

Algiers might be compared to a tumble-down house in which the drains have been repaired and the lower floors rebuilt, while the ancient attics remain the same. The attics of the town are the pirate town. Gleaming white against the blue of sky and water, it climbs above the mansions and the wharves of the intruders, and from a distance it looks like a pile of ivory dominoes. Each little flat-topped house seems to be peering over its neighbor, and at the summit is the Kasbah, the fort of the old Arab rulers.

Hidden Beauties of the City

In bygone days, the sight of a strange sail on the horizon would cause these

roof tops to be crowded with excited people. Was it the ship of a Barbary pirate returning laden with plunder and slaves? Piracy has come to an end, but the Algerians still climb to their roof tops to watch for ships. Algiers was a base for Allied forces in World War II.

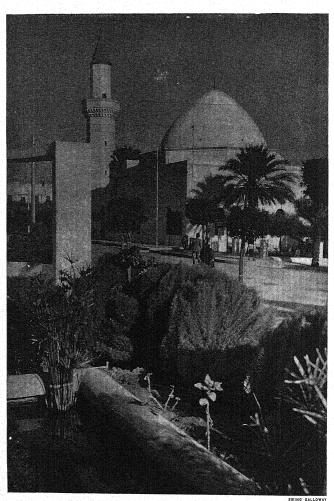
The old town is without a real street, and its winding alleys are closed to all save pedestrians and little, laden donkeys. Many of the houses are built over these alleys, up which climb white-clad Arabs with slippered feet. Blank, white-washed walls line these narrow ways, for the houses, like the Arab women, hide their beauty. Inside them we should find cool courtyards in which fountains play, and carved balconies overlooking the enclosures. Beautiful tiles cover the walls, and the plaster is molded into intricate patterns.

The bazaars of Algiers are fascinating places, in which the old life of the town can be seen. The shops are little booths raised from the ground, at which the owners sit cross-legged waiting for their customers. There are shoemakers' shops, where the wizened craftsmen sit stitching at heelless colored slippers. On all sides are piles of slippers, tasseled and embroidered in scarlet and green silk.

Fair People of the Algerian Hills

Here is a jeweler working with such tools as were used in Harun-al-Rashid's Bagdad. There are metal-workers, hammering brass into the most delightful bowls and boxes; and through the throng moves the itinerant water-seller, and the Maltese who has wandered up from the French town to sell picture postcards to travelers. The whole atmosphere of the crowded, noisy market place is gay. It is an exotic, story-book place; and the turbaned heads of the merchants, bending over their earthen jars and brilliant fabrics, awaken memories of the Arabian Nights.

From the old town can be seen the wooded slopes of the hills, where the Kabyles, or Berber Arabs, live. They are a distinct race of people and are the descendants of the original inhabitants.



IN THE SEACOAST CITY of Homs, the beehive dome and slender minaret of a mosque gleam dazzling white in the sun. Homs lies in Tripolitania, which is a part of Libya.



AT A PEPPER MARKET in Nabeul, Tunisia, red peppers are piled so high that they nearly hide the cart that carries them. They are highly prized for their sharp, biting flavor.



EWING GALLO

A BROAD WHITE BOULEVARD IN THE MODERN QUARTER OF ALGIERS

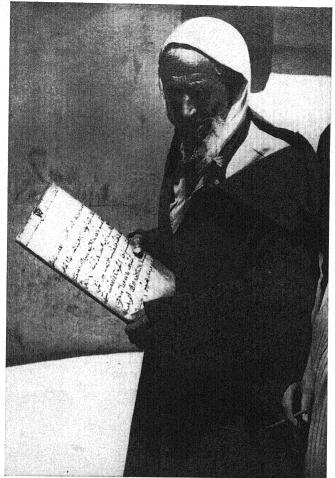
Large buildings that house business and government offices, department stores and hotels line the Boulevard de la République, one of several fine streets in the heart of Algiers.

Many of them are fair. They are farmers and graziers, and on the hillsides are fields, pastures and orchards.

Agriculture is flourishing in Algeria, for the French encourage farming by developing irrigation schemes and many French farmers have settled there. Although the natives use the most primitive methods in working their farms, they produce large quantities of wheat, barley and oats, a variety of vegetables, tropical fruits and tobacco, most of which are shipped to France to keep the markets

supplied during the winter months. From the grapes, which also grow luxuriantly, large quantities of wine are made. The fertile part of Algeria is a narrow strip of land bordering the sea; farther south and running parallel to the coast, there are the high plateaus of the Atlas Mountains, which extend to the waste of sand and rugged hills on the northern edge of the Sahara Desert.

Traveling through Algeria, we shall see orange groves, cornfields and the redroofed farmhouses of settlers. In places



BLACK STAR

AN AGED SCHOLAR WITH AN ANCIENT TEXT FROM THE KORAN

A teacher at the Tlemcen, Algeria, mosque school instructs his class with a board, on which are printed, in Arabic, quotations from the Koran, sacred scripture of Mohammedans.

the most sacred city in the eyes of the Mohammedans. In 1881, the French forced an entry through one of the five gates in its walls and much of its sanctity was destroyed. Although now connected by railway with the coast, it has been little modernized and is still essentially Arabian.

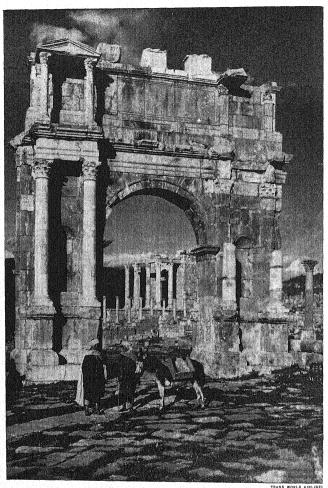
IN KAIRAWAN (OR KAIROUAN), once a forbidden city to all "Un-believers," we may now wander without inhirdance. We may ever go into the mosque, a thing we can do in no other Tunisian town. This is strange when we consider that Kairawan is, after Mecca and Medina.



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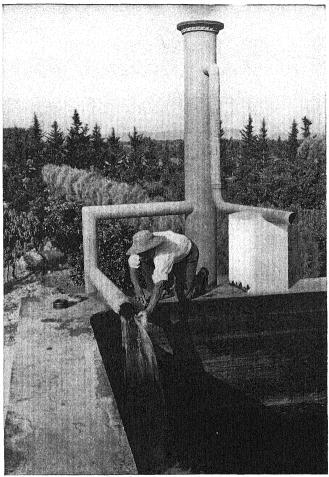


ALGERIAN GIRLS are often quite beautiful, as witness this jewel-decked Kabyle who so proudly displays the charms of her person and raiment. The beauty of the womenfolk—a beauty they lose very early—is not surprising considering the thousands of lovely girls who were captured by the Barbary corsairs and were brought back for the Algerian harems.



RUINS OF CUICUL AND THE TRIUMPHAL ARCH OF CARACALLA

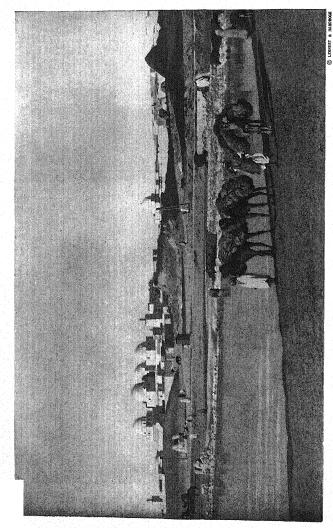
At Djemila near Setif in Constantine Department are the ruins of ancient Cuicul, a Roman town It flourished in the third century A.D., during the reign of the Emperor Caracalla.



EWING GALLOWAY

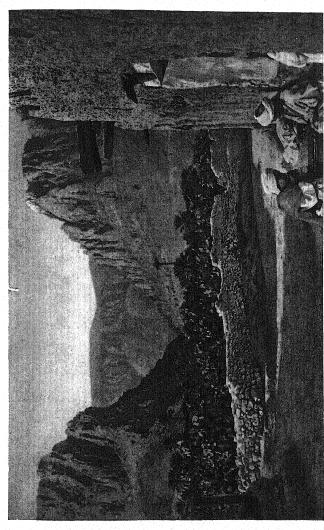
SPARKLING WATER FLOWS TO MAKE A THIRSTY LAND FLOURISH

A diesel engine turbine pump provides water to irrigate orchards and truck gardens in fertile valleys near Tunis that get little rain. The soil is well suited to the growing of fruit.



THE AFRICAN MECCA, the holy city of Kairawan, or Kairouan, is in A Tunisia and stands in a plain once covered with gardens and olive and na ongegroves. It is now baren except for a scrub of sage, though the soil of is ferthe and water is not wanting. When, in 670, Stil Okbs, a great s

Moslem soldier, wished to found, in Africa, a city that would be the rallying point for the Mohammedans, he is said to have stuck the butt of his lance in the ground in the middle of what was then a forest, and said, "Here is your Kairawan" (resting-place), thus marning it.



THE GATE OF THE DESERT towards which we are looking from the Sabaran side, is very sittler areas to a so sharen side, is were sittler are no to state, has been running if a hours through narrow mountain googes, and, by means of tunnels, through chain after chain of rugged desolate.

mountains, Suddenly it issues from a tunnel into the gorge of Ed Kantara—"the Gate of the Desert"—and nothing but flat desert lies before it. The palm trees, the crumbling wall and the mud bouse are in the osis of El Kantara. The mountains belong to the Aures system

we may see herds of camels grazing on the hillsides. The Arabian camel is used throughout North Africa, and without him commerce and travel would be almost impossible, though motor cars are

being used more and more.

Situated on a rock over two thousand feet in height, which is cut off from the surrounding country on three sides by a beautiful ravine is the city of Constantine, aptly named by the Arabs "the city of the air." It is an ancient city rebuilt by Constantine the Great in the fourth century on the site of a Roman colony, Within the past one hundred years, new streets have been laid out and many fine buildings constructed, but the native quarter with its winding lanes and flat-roofed houses, remains truly Oriental.

Algeria's Largest Oasis

From Biskra, an oasis noted for its beauty, we can take a peep at the desert. The town is a great meeting place for the desert people, and if we stay there long enough we are almost certain to see representatives of all the tribes inhabiting the Sahara. Biskra is well-watered by underground springs, and hundreds of thousands of date palms grow in the neighborhood. There are half a dozen Arab villages in the Biskra oasis, but the town itself is a curious mixture of ancient and new, for its delightful winter climate has made it a popular resort with several fine, modern hotels.

In a shady corner we may come upon an old marabout, or holy man, tracing figures in the sand. He has charms and amulets-pink coral to avert the evil eye, the hair of a four-months-old baby for protection against scorpions, verses from the Koran sewed into leather bags, and many others. He earns his living by selling these charms to superstitious Arabs. Past him hurry energetic tourists, equipped with guide books and sunglasses, perhaps accompanied by a Negro in a goatskin cloak.

In the Tunis of Today

When the Phoenician mariners first sailed into what is now known as the

Gulf of Tunis they saw on the horizon the symbol of their deity Baal, the Horned God-a happy omen, which, we may be sure, was not lost upon the founders of Carthage and Tunis, And today the pine-clad pinnacle of Bou-Cornein, which in Arabic means "the Father of Two Horns," is the most conspicuous landmark on the coast. It is so called because the summit is curved, forming two horns.

Tunisia is a kingdom within the French Union. In contrast with the turmoil in other French territories in 1955, Tunisia was peaceful. This was largely because it won self-government in that year. In general, only defense measures and foreign relations remain under French control. The wealth of Tunisia lies in a rather narrow strip of fertile coastal land. which on the south is succeeded by moun-

tainous country and desert.

The white city of Tunis lies on the Bay of Tunis, across which, at sunset, the red flamingoes fly to their homes among the reeds. People of all nations rub shoulders in its streets and boulevards, and the flags of many nations fly upon the ships in the harbor.

In the Perfume Bazaar of Tunis

In Tunis there is a street as fragrant as a flower garden. This is the perfume bazaar, where the scent of thousands of roses is imprisoned in little crystal vials. Each perfumer sits in his little cupboard of a shop, which is raised several feet from the ground, and the air is heavy with the mingled perfumes of orange blossom, attar of roses and verbena.

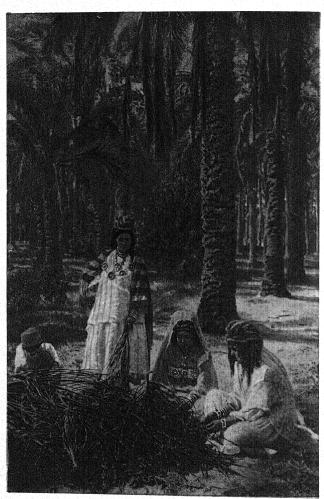
These sellers of perfumes claim descent from the Moorish aristocrats who were driven from Spain in the fifteenth century. Often their most treasured heirloom is the supposed key of an ancient castle in Spain, which, it is to be feared, is sometimes as legendary as the proverbial ones.

The Arab shopkeeper is a man of leisure. His booth is his bed and there he dozes, drinks coffee and prays occasionally. He seems indifferent to custom and puts more faith in Allah than in

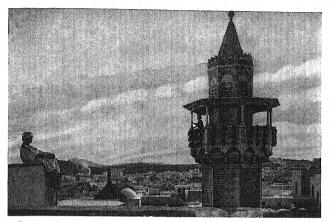


EWING GALLOWAY

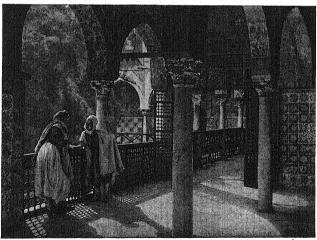
DATE PICKERS IN LIBYA, NORTH AFRICA, SCRAMBLE UP THE PALM TRUNKS Much of Libya is desert country. Along the coast, however, bordering on the Mediterranean, are oases where groves of date palms and olive, orange, lemon and almond trees flourish.



THE DATE HARVEST is of great importance to the oasis-dweller, for dates are his chief food and his chief article of commerce while the branches are used for thatching his buildings. The golden-brown fruit, hanging in heavy clusters is cut down in the autumn, and the sorting, storing and packing them keep men, women and children busy for weeks.

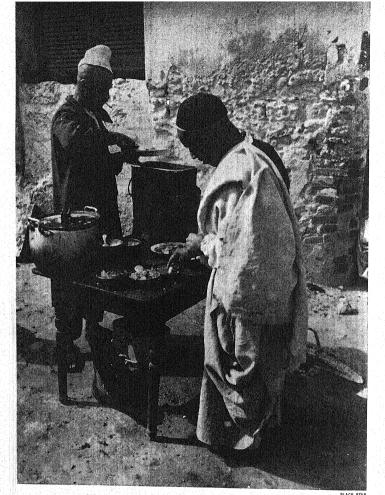


WHITE TUNIS—Tunis la Blanche—lies spread out below the muezzin, who, from the gallery of the minaret, turns his face to the east and calls the Faithful to prayer. Tunis is a beautiful city lying beside a shallow lake that is connected by a strait with an inlet of the Mediterranean. The ruins of ancient Carthage lie only a few miles away.



(E. H. A.

IN CONSTANTINE, third city in Algeria, we shall find many wonderful examples of Moorish architecture, but none will please us more than the building that was formerly the palace of the beys of Constantine, with its sunny galleries, graceful arches and colored tiles. This is one of the historic buildings of the old town. Parts of it date from 1232.



SNACKS FOR SALE IN THE LITTLE TOWN OF SUK EL GIUMA

The vendor wears what looks like a chef's hat at a rakish tilt; and his service is uncomplicated by knives or forks. Pieces of bread serve instead. Suk el Giuma is in an oasis on the coast of Tripolitania, a part of Libya. Most of the region is desert, which in many places edges on the Mediterranean, so that even along the coast there are oases.

'TWIXT THE DESERT AND THE SEA

advertising or salesmanship.

Kairawan (or Kairouan), in Tunisia, is considered by Mohammedans to be one of the holiest cities in Africa, being sometimes known as the "African Mecca." It is visited by many pilgrims. Roman cities fell that Kairawan might rise, for, as it was built soon after the Arab conquest, it was largely constructed of pillaged Roman masonry. Cornices from temples to Roman gods are built into the city walls, and some of its foundation stones are the altars where pagan sacrifices were once performed.

Tripolitania, Cyrenaica and part of the Sahara area known as the Fezzan make up the Arab kingdom of Libya. The independent kingdom came into being on December 24, 1951, with the proclamation of the newly chosen king, Idris I. The United Nations had a friendly part in the making of Libya, and several richer, older nations have promised to aid the new

country in its growing years.

The Fezzan, in central and southern Libya, is sparsely settled, with only about 4.3 inhabitants per square mile. The land is largely desert, with few good roads. There are fertile oases, however, where date palms are grown. Transportation is largely by camel caravan.

Cyrenaica, in the northeast, is rapidly becoming modernized, and the people are clamoring for education. Bengasi, chief port, is the seat of the regional government. There is an airfield near by, and short railroads and good highways are centered here.

Archaeologists have uncovered in Cyrenaica a wealth of Greek and Roman remains, buildings, sculptures, ceramics and other ancient treasures.

Tripolitania forms the western portion of Libya. It is largely farming country, where citrus fruits and olive trees flourish, and fields of barley ripen under the

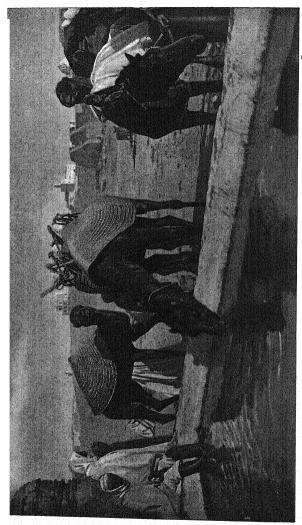


TRANS WORLD AIRLINES

LETTERS WRITTEN AL FRESCO

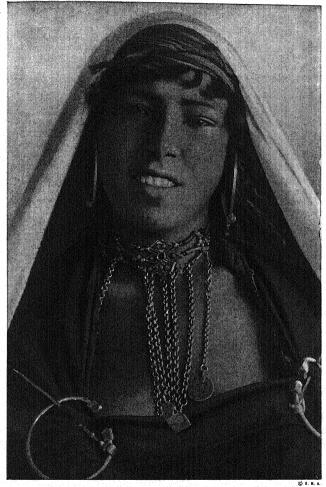
A familiar street-corner stand in Algeria is that of the letter writer, who, for a fee, will take dictation or will compose for you any sort of missive you desire. Illiteracy among the Moslems is still high, perhaps up to 90 per cent. Comparatively few Moslem children in Algeria go to school.

The picture above was photographed in the city of Constantine.



AT THE JOURNEY'S END both man and beast, though bardened to desert life, are glad to see before them the walls and minarets of a town and to know that soon they will find plenty of water for their refreshment. While the Arab on the 'ef', bathes his weary feet, the camels

come to drink, still wearing over their humps the basket "costs" that prevent their backs and sides from being chaired by saddle or pannier, that this camels are not yet unloaded. The presence of a horse shows that this city is only on the fringe of the desert.



A BEDUIN WOMAN of Tunis admires silver ornaments—earrings, brooches and jeweled necklaces,—and she likes to wear many at one time. Often she wears a large part of her husband's capital, and as his wealth increases so will the number of silver chains, supporting coins or charms, that she fastens to her necklace. Chains may dangle from her brooches as well.

soft Mediterranean airs.

The capital and chief city is Tripoli, called "the white city" by the Arabs, who built there a number of beautiful, gleaming mosques, a palace for the pasha and other handsome structures. Tripoli was once the center of a great slave trade, and it was one of the chief ports from which the Barbary pirates sailed out to prey on European and American shipping, around 1800, capturing hostages for ransom as well as treasure. United States Marines put an end to those bad old days; and their accomplishment is remembered in the Marine Corps anthem: "From the halls

of Montezuma to the shores of Tripoli."

Tripoli is very close to the desert, and one feels the presence of the immense Sahara, even when wandering through the city streets. From some convenient vantage point we may glimpse a string of camels afar off, bringing loads of ivory or other merchandise to market.

The Arabs who inhabit the desert are from a hardy race of nomads, descendants of the fanatical warriors who overwhelmed Roman Africa centuries ago. They count their wealth in horses, camels and sheep and move from one oasis to another under the guidance of a sheik.

ALGERIA, TUNISIA AND LIBYA: FACTS AND FIGURES

ALGERIA

Bounded on the north by the Mediterranean Sea, on the east by Tunisia and Libya, on the south by French West Africa and on the west by Spanish Sahara and Morocco, it is a Government-General within the French Union. There is an Algerian Assembly. There are three departments, Oran, Algiers and Constantine, that send delegates to the French Parliament, and four Southern Territories. Total area, 847,500 square miles; population, 8,876,016. Agriculture is important but restricted to the coast; 1/3 of farm acreage is owned by Europeans. Chief farm acreage is owned by Europeans. Chief crops are grains, potatoes, artichokes, beans, tobacco, flax and many kinds of fruit. Forests include cork and evergreen oak, pine, dwarf palms and cedar. Livestock, 9,227,000 head, more than half of which are sheep and goats. Fishery products include sardines, anchovies, tuna and shellfish. Leading mineral products are iron ore, phosphates, iron pyrites, coal, zinc and lead. Electric-power production, 586,000,-000 kilowatt-hours in 1950. Chief exports are wines, alfa (esparto grass), phosphates and iron ore; leading imports are textiles, sugar, iron and steel, petroleum and cereals. Motor roads, 33,-200 miles and 6,060 miles of desert roads; railways, 2,780 miles; 77 airfields; number of telephones, 81,800. People are mostly Mohammedan; others, Jewish and Christian. Education: 332,000 pupils in 2,190 primary schools; 23,400 in 146 secondary schools; nearly 5,000 in university at Algiers; also professional and technical training schools as well as higher Moslem schools. Population of chief cities: Algiers (capital), 315,210; Oran, 256,661; Constantine, 118,774; Bône, 102,823.

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A protectorate within the French Union, it is bounded north and east by the Mediterranean Sea, on the east and south by Libya and on the south and west by Algeria. Area, 48,333 sq. mi.; population, about 3,630,000. The bey of Tunisia (a hereditary monarch) governs the country,

which acquired home rule in 1055. There is a French high commissioner who is responsible for protecting French nationals and French interests. Farming is the chief activity, producing wheat, other grains, ofive oil, wine, dates, almonds, citrus fruit, cork; livestock, 0,275,800 head. Minerals produced: phosphate, tron, lignite, lead and zine. Electric-power production, about 154,000,000 kilowatt-hours in 1050. Exports: cereals, olive oil, dates and citrus fruits, phosphates and other mineral ores. Imports: textices, machinery and manufactured goods. Roads, 5,445 miles; railways, 1,303 miles; telegraph lines, 2,327 miles; telephone lines, 52,200 miles. Religion: Moslems predominate. Education: a total enrollment of nearly 194,528 in 604 primary, 15 secondary and 55 technical schools, 2 normal colleges, 3 special schools and a Moslem university. Population of chief cities: Tunis (capital), 364,503; Sfax, 54637.

IIRVA

Bounded on the north by the Mediterranean Sea, on the east by Egypt and Anglo-Egyptian Sudan, on the south by French Equatorial Africa and French West Africa and on the west by Algeria and Tunisia; area, 679,388 square miles; and population, 1,681,626. A former Italian colony, made up of Tripolitania, Cyrenaica and Fezzan, Libya enacted a constitution in October 1051 and became independent, December 24, 1951. Chief agricultural products are dates, olive oil, citrus fruits, grain and alfa grass; iivestock, in Tripolitania and Cyrenaica, 1,677,128 head. Other important industries: sponge and tuna fishing and tobacco growing and processing. Exports: hides and skins, wheat, vegetable oils, esparto and sponges; imports—food, motor cars, machinery and building materials. Railways, 233 miles; roads, 2,200 miles; international telephone, telegraph and cable connections. Moslems predominate; Jewish population, 30,046. Education: over 42,070 pupils in 317 schools of all kinds. Population of chief towns: Tripoli, 146,000, and Bengazi, 60,000 (joint capitals).

EGYPT'S WONDERS OF THE PAST

Its Vast Temples and Palaces and Their Builders

The fertile valley of the Nile includes most of the cultivated land of Egypt. It is full of interest because of the daily scenes of its cities and villages and, to all who like to think about the things that men did in past ages, it is one of the most attractive places in all the world. We may have a glimpse of present-day Egypt in the chapters on Cairo and the Gift of the Nile. Here, we are to read of the Egyptians who lived thousands of years ago and of the wonderful tombs, temples and sculptures which they left and which reveal to us the very life of those ancient times.

A NCIENT Egypt was one of the most curiously shaped countries in the world. It consisted of two

narrow strips of fertile land, one on each side of the Nile, bevond which stretched vast deserts. Thus, although it was several hundred miles in length, Egypt was only a few miles in breadth. The prosperity of the land depended upon the Nile. Along it ships brought trade to the towns; its annual floods enriched the fields with a coating of mud: from it the obtained villagers water for irrigation -as they do still.

This country was the home of one of the oldest civilizations. Even previous to the beginning of written history. which some historians say was seven thousand years ago, there were people living in Egypt whose flint implements and pottery indicate a civilization equal to that of any people about whom we know. Paintings on vases show that they used boats with oars and even sails, and they cultivated

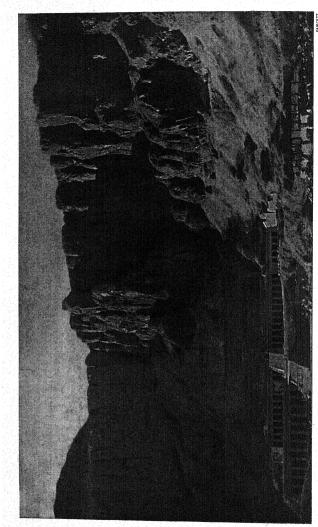
grain. All these things have been found in the graves, for the Egyptians believed in a life hereafter and they thought it necessary to be buried with their possessions in order that all would be ready for them when they passed over into the after-life.

History begins with the rule of Menes who lived. some believe, about 5500 B.C., though others think it was not until 3400 years before the birth of Christ, Menes united the two provinces of Lower and Upper Egypt into one nation and established the city of Memphis where he made his residence.

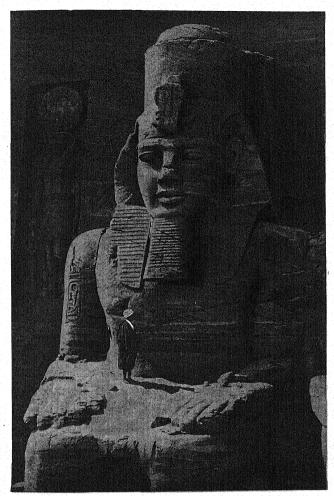
From his time on, there have been so many rulers of Egypt that historians have divided them into thirty dynasties or families



equal to that of any THOTHMES III established the influence other prehistoric of Egypt in western Asia 3,500 years ago.



incense for the temple, an expedition was sent by the queen to Punt, "Land of the Gods," which was south of the Sudan and reached to the Sea. This was about 3,500 years ago but a carved record of the expedition can still be seen on the temple. OUEEN HATSHEPSUT built this terraced temple to the god Ammon beneath the cliffs at Deir-el-Bahir. Chapels were dedicated to the goddess Hathor and to Anubis, the god of the dead, and several chambers were also devoted to the worship of Hatshepsut herself. To secure myrth and



HEWN FROM SOLID ROCK, four immense statues of the Pharaoh Rameses II of Egypt stand outside the temple of the Rising Sun at Abu-Simbel, two on each side of the entrance. Here we see an Arab standing on the lap of one of these enormous figures. He seems an insignificant dwarf, indeed, compared with the statue of the long-dead ruler.

EGYPT'S WONDERS OF THE PAST

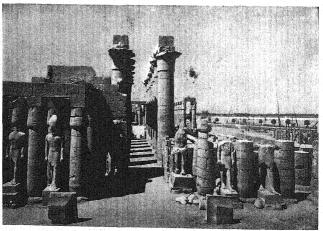
in each of which reigned many kings, known as Pharaohs. The names of these have been gleaned from tablets and papyri, for early Egyptians inscribed their deeds by means of pictures and marks which learned men have deciphered for us. This was the earliest form of writing.

Outstanding among the Pharaohs was Khufu, or Cheops, who organized the government so that the country was ready for the greatest period of its history. He built the Great Pyramid in 2000 B.C. and it far excels anything that has been constructed even to this day, but we shall read of that in the chapter on the Sphinx and the Pyramid.

At the height of its power, about 1560 B.C., ancient Egypt was an empire comprising not only the Nile Valley but Palestine and the greater part of Syria. Thothmes III was ruling then with the assistance of his step-mother, Hatshepsut, who seems to have been a very able woman and was undoubtedly the first

feminist. She is often referred to as the "Queen Elizabeth of Egypt." Thothmes III. possibly the greatest ruler in Egyptian history, led his army in seventeen campaigns against the Syrians, crossed the Euphrates and received gifts from the Hittites in Asia Minor and from the king of Babylon. During his reign, the peoples of Punt and Ethiopia, just south of Egypt, acknowledged its supremacy and sent enormous quantities of ivory, gold and spices to its temples and courts. Ships and caravans traded with Babylon. Crete, Greece and various Syrian towns. Records of all these activities were chronicled on the walls of the great temple at Karnak.

Of the same dynasty but living a hundred and sixty years later was Amenhotep III, who is known as a great builder. The magnificent temple at Luxor, temple pylons and whole avenues of sculptured rams, though damaged by time, are still viewed by thousands of tourists each



TRANS WORLD AIRLINES

THE COURT OF RAMESES II WITHIN THE RUINS OF LUXOR TEMPLE

The most famous ruin in Luxor is the temple, its sculpture still noble though battered by time. Built by Amenhotep III of the eighteenth dynasty, it occupies the site of an older sanctuary.

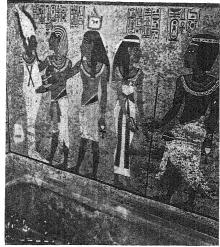
EGYPT'S WONDERS OF THE PAST.

year. Cuneiform tablets of this period show that he carried on quite a correspondence with the king of Babylon and other monarchs in far-

away lands.

His son, Amenhotep IV, stands out because he was a religious fanatic. Casting aside all deities, including Ammon and many others whom they worshiped and in whose honor they had built and decorated these vast temples, he forced the people to worship a universal god "Aten" who represented the sundisk. He even changed his name to Akhenaten which means "pious to Aten." While he was so busy with religious reforms, however, his country was having political troubles and he lost Syria and other territory in outlying districts. Although his son-in-law, Tutankhamen, restored

Ammon and the former deities to their places as the objects of worship, he did nothing to get back the lost territory, and it was not until the next dynasty, about 1240 B.C., that Seti I and his son, Rameses II, regained it. Rameses II is supposed to have been the oppressor of the children of Israel who, we remember from the Bible, came to Egypt because of a famine in the land of Canaan. So prosperous did they become that the Pharaoh made it very hard for them and they finally went back to their own land. Rameses II may not have treated the Jewish tribes justly but he did a great deal for Egypt. Following his reign, however, there was a long period of decline and the country finally fell to the Persians who were themselves driven out by the Greeks in 332 B.C. under the generalship of Alexander the Great, famous king and conqueror.



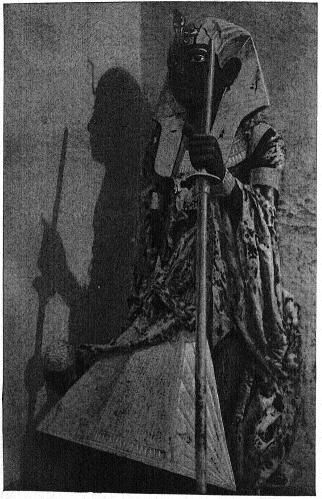
TRANS WORLD AIRLINES

IN THE TOMB OF KING TUTANKHAMEN

At lower left can be seen the beautiful head of the richly ornamented golden coffin, the innermost of three, in which the boy king of the second millenium B.C. was entombed. The coffin was made in human shape and his face was painted upon it.

When, after Alexander's death, his dominions were divided up, Egypt fell to Ptolemy, his lieutenant, who founded a dynasty by that name which lasted about three hundred years. The last of his line was the famous Cleopatra, who killed herself by means of a poisonous snake, and her empire fell to the Romans.

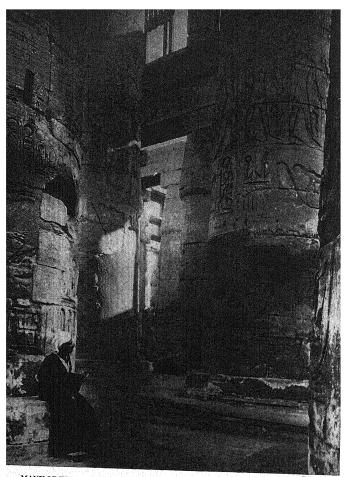
But let us pay a visit to some of the ruins of ancient magnificence. Perhaps the most wonderful are the Pyramids and Sphinx, but we shall leave them for the time being and go on, not so very far, to the site of the ancient city of Memphis, the royal capital of Egypt five thousand years ago. Nothing remains to-day of this city, formerly so great, but the ruins of temples, palaces and dwelling-houses. Even the gigantic statues of the Pharaoh Rameses II, that once stood here, have fallen to the ground.



THIS STATUE OF TUTANKHAMEN, one of the two that stood in the ante-chamber of his tomb, like sentinels guarding the dead, is of carved wood, splendidly adorned with a head-dress and ornaments of beaten gold. It is seven feet in height, and the head-dress has the upraised serpent, the sign of loyalty. King Tutankhamen lived over 3000 years ago.



ROYAL TREASURE, including gold-plated furniture and rich gifts to the dead king, surround this statue of Tutankhamen, which is shown also on the opposite page. Here we see a beautifully decorated clothes chest, alabaster vases that once held spices and the remains of bunches of flowers. These were believed to be used by the dead in the other world.



MANY OF THE PHARAOHS had a part in building the great temple of Ammon at Karnak. The massive, figured columns are one of the chief wonders of ancient Egyptian architecture.

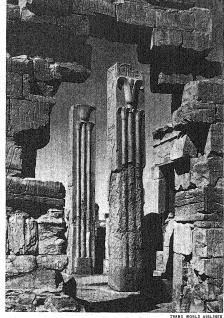
EGYPT'S WONDERS OF THE PAST

More interesting is Tell-el-Amarna, a town founded in 1340 n.c. by Pharaoh Akhenaten, the father-in-law of Tutankhamen. Here we can pace the ancient streets and alleys, and visit the palaces and mansions of the king and his great men. A few exquisitely beautiful paintings and sculptures remind us of past glories.

When we inspect the dilapidated little houses in the workmen's quarter we can easily imagine how the poor folk lived in the days of Akhenaten. Some of their food-bowls and water-jars are still in a perfect state of preservation and could well be used to-day. The Pharaoh himself had a wonderful pleasure palace with gardens, an artificial lake and many pools.

The Egyptians were famous for the immense size of most of their important temples and monuments, as well as for the magnificence of the decorations that they lavished on them. Let us go to Dendera and visit the huge temple of

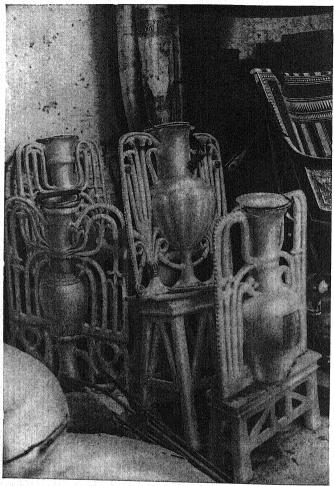
the goddess Hathor. This was built in comparatively modern times—about the beginning of the Christian era. The pillars of the temple, all of them covered with carvings and richly painted, are about forty feet high. On the outer walls is a figure of Cleopatra, one of the most famous queens in the world's history, that is almost three times the height of an ordinary man. The greatest pains were taken to make the temple beautiful, and although it is now in ruins, it has not entirely lost its magnificence.



THE GLORY THAT WAS ANCIENT EGYPT

In the ruins of the great temple at Karnak, tall pillars bear the sculptured lotus and papyrus. The lotus pillar (foreground) was a symbol of Upper Egypt; the papyrus, of Lower Egypt. The lotus, a water-lily, was known as the sacred lily of the Nile.

Traveling up the Nile from Dendera, we presently arrive at Thebes. We shall not, for the moment, visit the city itself but the temples, and especially those of Karnak and Luxor. Among them all, the temple of Ammon first claims our attention, since it is the largest and one of the most splendid. Almost four hundred years were spent in building it; and as we look at the huge pillars in its famous Hypostyle Hall, at the enormous blocks of stone of which its walls and towers are built and at its gigantic statues, we wonder



ALABASTER VASES were among the many priceless treasures found in the tomb of Tutankhamen, who died about 1350 B. C. Their exquisite shapes and decorations show how artistic were the craftsmen of Egypt in those ancient days. The fragrance of the perfumed ointments that these vases contained was still perceptible when they were discovered in 1922-23.

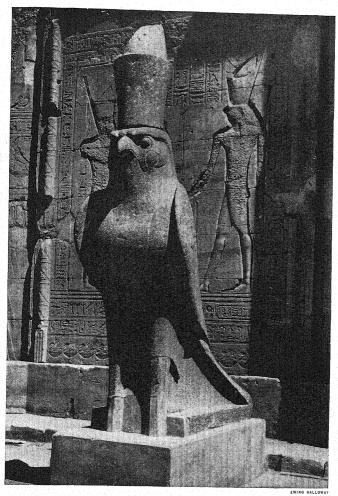


BESIDE THIS SHRINE, which was placed in the ante-chamber of Tutankhamen's tomb, stands a wooden ushabti figure. On it is painted a charm to ensure that its soul shall obey the dead king in the other world. The shrine is covered with heavy sheets of gold, and on its doors, here shown open, are depicted incidents in the lives of Tutankhamen and his wife.

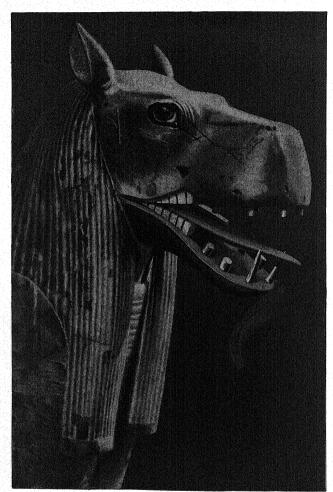


Figures and inscriptions narrate the stories and rituals connected with Hathor, the Venus of Egypt.

They also tell something of the history of Cleopatra and the Ptolemies. HIEROGLYPHICS AND BAS RELIEFS COVER THE GIGANTIC REAR WALL



A CROWNED BIRD IN STONE BY THE TEMPLE OF EDFU, DEDICATED TO HORUS
The hawk, or falcon, symbolized Horus. Sometimes he was shown as having a man's body and
a hawk's head. Carvings such as those in the background decorated the temple walls.



THIS STRIKING CREATURE, with a long, slender body and legs like those of a cat, is one of the twin supports of the couch of King Tutankhamen, that was found in his tomb in the Valley of the Kings, a valley of rock-cut tombs, among the Theban Hills. The monster is made of wood, richly gilded, and its gleaming teeth and long, pink tongue are of ivory.



METROPOLITAN MUSEUM, N 1

I'WO WOODEN HANDMAIDENS, half life-size and beautifully carved, were found in the tomb of Mehenkwetre, a nobleman who lived about 2000 B. C. Models of servants were placed in the tombs of nobles and were called Ushabtis, or "Answerers," since their spirits were supposed to wait upon the nobles' spirits in the other world. They carry food in the baskets.

how it came to be built in an age long before cranes and other mechanical devices were known. Especially do we marvel at the genius of the ancient architects under whose care it was built, and at the patience and skill of the artists who adorned it with their carvings.

Very wonderful too are the temple of the moon-god, Khensu, the temple of Rameses III, in which the pillars are carved to represent the god Osiris and the long avenues with rows of sculptured sphinxes on each side of them, that lead to the various temples. We must not miss the temple of Amenhotep III, however, for it is very splendid. Its doorways were in his time studded with gold, and the forecourt, which was built by Amenhotep, was paved with silver. Round this court are seventy-four columns, each in the form of a papyrus-bud.

Where the Pharaohs Were Buried

Beyond the Theban temples we see a line of bleak hills against the deep blue of the sky. In them is the desolate Valley of the Kings, which contains the burial-places of many of the great Egyptian Pharaohs. They were hidden here so that their bodies might not be disturbed by thieves in search of the gold and jewels that were buried with them. In this valley was found, in 1922, the tomb of the young King Tutankhamen, with all his treasures, but he was a very unimportant monarch compared with some of the others who were buried near by.

The graves of mighty Rameses II, of Amenhotep III, of Thothmes III and many another ruler of Egypt have all been discovered here. Some of the tombs are marvelously decorated, and from the pictures and carvings in them we may learn much about the ancient Egyptians. Others have contained articles of furniture and personal belongings of the dead kings, and from these also the story of the past can be read.

Embalming the Royal Bodies

The bodies of the kings as well as of all who could afford it were prepared for burial by a long and costly process. Em-

balmed first, the body was then wrapped tightly in fold after fold of linen which had been soaked in some kind of preservative and placed in a coffin made in the likeness of the person it contained. This statue-coffin was placed in still another coffin of stone or wood. Thus, the remains and all its possessions awaited the day when the immortal soul should return. In the Museum of Antiquities at Cairo, the mummies of some of the famous Egyptian kings are on view, while in our own museums we may see the mummies of less important persons. All this has served to make the Egypt of the past very real to us to-day.

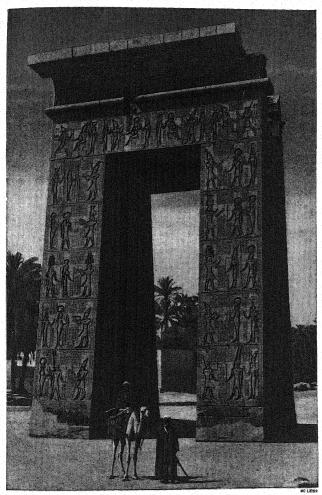
There are many other temples and monuments in different parts of Egypt that we might visit, but we shall leave the lifeless statues and great empty buildings and turn to the people who erected them.

Let us imagine ourselves in Egypt about 1240 B.C., in the days of the great Pharaoh Rameses II. We are at Memphis, but we wish to visit friends at Thebes, and so hire a boat in which to travel up the Nile. Our voyage will be extremely comfortable, since our deckcabin is not too small and is very airy and handsomely furnished. We embark. Luggage and stores are all aboard. The rowers bend to their oars and we begin to glide placidly up the river. Day after day we proceed, sitting when it is not too hot on the high platforms at the bow and the stern to watch all that happens on the banks. Sometimes a breeze springs up and the gaily-colored sails are hoisted.

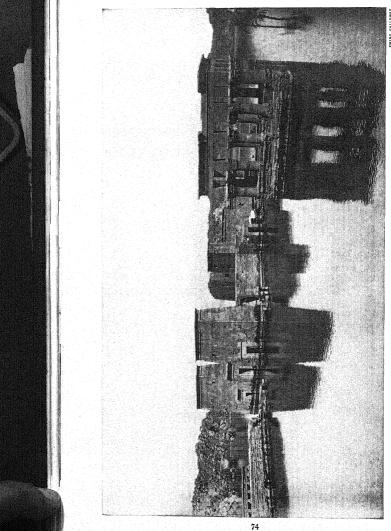
We Are Welcomed by the Merchant

At last we see Thebes, the most magnificent city in all Egypt, and the temples of Karnak and Luxor with three bare grim hills beyond them. Our boat is moored to the stone-paved quay, and we go ashore to meet our friends. One of them, a merchant, comes forward to greet us. He is bareheaded in spite of the hot sun, wears a linen robe with a long skirt and carries a stout cane.

He limps a little, since his laced leather shoes are new and tight. His wife, our friend explains, is looking forward



FHIS SCULPTURED ARCH of Ptolemy III, at Karnak, stands on the site of ancient Thebes. It is in the avenue that leads to the temple of Khensu, the god of the moon. The arch has carved reliefs showing Ptolemy III, a warrior king of Egypt who lived in the third century B. C., offering sacrifices to the gods of Thebes. The architecture is typical.



the two cut-off pyramids (left) forming the entrance to the temple of Isis, and the pillared pavilion (right), never completed by its builders of old. TEMPLE OF ISIS AND PAVILION KNOWN AS "PHARAOH'S BED" ON THE SUBMERGED ISLAND OF PHILAE When the Nile was dammed at Assuan, the island of Philae was submerged. At times even the buildings are completely under water, including

EGYPT'S WONDERS OF THE PAST

eagerly to our visit, but she is at present at her jeweler's waiting while he makes a bracelet for her from a bar of gold that she was given that morning. Our other friend, a captain of the Libyan soldiers, would also have been on the quay to meet us had he not been obliged to investigate a case of theft, for his detachment acts as a police force in the workmen's district. The merchant suggests that we should go to this district on our way to his home on the chance of seeing the captain.

In the Streets of Thebes 1240 B.C.

The streets are narrow and the little houses of sun-baked mud are mainly of one story although some have two. Since very few of the doors are closed we can easily look inside. There is little furniture to be seen—palm-leaf mats that serve as beds and couches, some earthenware dishes and jars containing water and oil and a small image of a god are usually all that a workman's family possesses. Sometimes there are also two or three wooden chests, and in some of the two-story houses a room on the ground floor serves as a stable for a donkey.

Scantily dressed children swarm everywhere, and in most of the houses we see women busy at household tasks. Here is one grinding corn; there one is baking bread, the chief food of the poorer people. Another, helped by a neighbor, weaves cloth at a rough loom. We see very few men, however. Most of them went to work at sunrise taking with them their dinner—bread soaked in oil and some fruit—and will not return home till sunset.

We see some of them at work as we draw near to the market. The clang of hammers attracts our attention to a metal-worker's shed. Two brawny fellows are fashioning harness for a pair of chariot horses. Our friend speaks to a carpenter who is making some very handsome chairs for him. When we resume our walk he tells us not to go too near a certain booth. It is the workshop of a dyer, he explains and adds, quoting from an Egyptian poem, that the dyes are "evil-smelling as bad fish." We hear the tramp of a party

of men, and our other friend, the captain of Libyans, appears with a file of his soldiers.

Negro Soldiers and Sailors

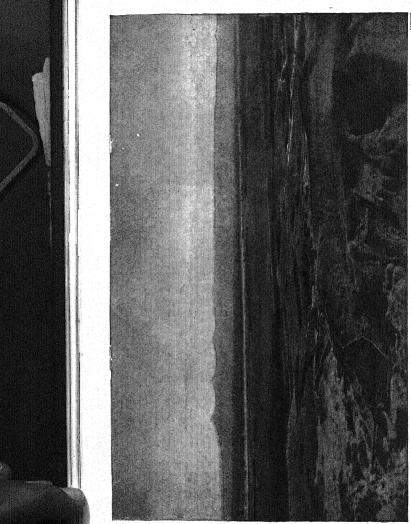
In front of the line is a trumpeter and behind him a dozen infantrymen carrying light shields and axes and with spears sloped over their right shoulders. They wear felt caps and waist-cloths, but no armor, and are a very well-disciplined body of men. Behind comes the captain, unarmed though he carries a decorated baton of command. He is an Egyptian, appointed to the Libyan legion by Pharaoh, but the soldiers are Negroes.

As we pass through the market, let us look at the crowds around us. There are artisans, dressed only in waist-cloths, with their wives, who wear simple smocks. Clerks and priests in short kilts pass by, and smart merchants like our friend. Sellers of perfumes and roast meats, bakers, shoemakers and toy-makers urge us to inspect their wares. A barber wishes to shave us. The slave attached to a little restaurant suggests that we should have our evening meal there.

Marketing without Money

Our friend waves them all away, but wishing to buy us a present, stops at a perfume stall. Several little jars of scent are shown to us and we smell them, finally choosing two. Our friend takes another and offers the saleswoman a small block of gold for them. She declares that it is not enough. After a quarter of an hour's bargaining she accepts the merchant's offer and tells us that she is extremely pleased to be paid in gold, since that morning she has taken a pearl necklace, a silver bracelet and a fan set with gems in exchange for perfumes. Our friend explains as we stroll away that this system of barter is the custom.

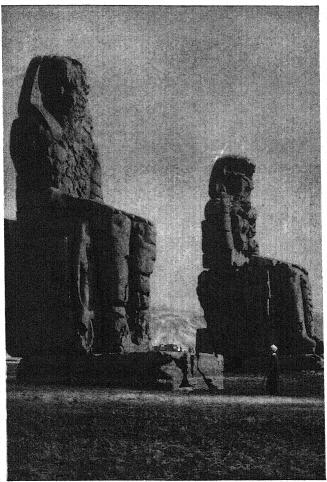
Presently we arrive at his house. It is quite an imposing mansion of three stories and has a large courtyard surrounded by a high wall. The large windows of the two upper stories overlook the street. Within we find magnificent furniture—chairs, carved and gilded, chests with little



FROM THE THEBAN HILLS above the Valley of the Kings, a royal burial ground of ancient Egypt, we hook across a flat, green plain to the Nile and the far-away heights on the other side of the river. Beyond the ferband shoulder of the ridge in the foreground we see the columns

of the ruined Ramesseum, a temple built by Rameses II, one of the gractest of the Pharachis, Nor much more than half of it remains to-day.

To the right of it are seen—tiny, light specks on the broad plain—the two coloss shown on the opposite page.



MC LEISH

THE COLOSSI OF "MEMNON," each about sixty-five feet high, stand by the Nile near the ancient town of Thebes. The Greeks and Romans took the right hand statue to represent the god Memnon, which, it is said used to cry mournfully at sunrise. The figures are statues of Amenhotep III and his wife Tiyi, a king and queen who lived about 1400 B. C.

EGYPT'S WONDERS OF THE PAST

pictures painted on them, and rich hangings. The walls are painted with figures of gods and scenes of everyday life.

The food that we are offered is excellent. We have roast meats in abundance, baked fish, stuffed duck and pickled fowl, fruit, bread and cakes. While we eat we hear news of the merchant's two eldest sons. One is an officer in the celebrated legion of Ammon—all the regiments are named after gods. He is going to take us to hunt wild fowl the next day on the estate of a noble. The other son is a scribe. This profession, it appears, becomes less and less confined to the middle classes for many of the working classes are educating their sons to become scribes.

When we retire for the night we find that we are to sleep on a mattress on the floor. Instead of having a pillow, we rest our necks on curved wooden supports. Everything is very clean, and the breezes that blow through our windows are cool and laden with the scent of flowers.

A Day of Hunting and Fishing

We go to the nobleman's estate the next day and, embarking on wooden canoes, proceed to a near-by marsh. We find plenty of wild fowl among the reeds, and our host soon kills three ducks with boomerangs. He has a pair of trained cats to retrieve the game for him. While he is throwing the boomerangs, slaves in two other canoes lower a net. This is soon drawn up filled with fish.

We dine with the noble and, while we eat, minstrels play on harps. Our host is a widely traveled man. As an army officer he has accompanied his regiment to Palestine and led a charge against the Hittites in his chariot. On another occasion he sailed down the Red Sea to Punt, on the East African coast, to obtain spices and gold for the Temple of Ammon. He is also well educated and in his library has books of tales and poetry, works on medicine and mathematics, all written on rolls of papyrus—sedge which was pressed to provide a flat writing surface.

By far the most interesting part of his life, so the noble tells us, was the period

when he was at court in attendance upon the Pharaoh Rameses II. He describes an audience to us. The monarch, seated on his golden throne, wore a double crown, to show that he was king both of Lower and Upper Egypt. On his forehead was the royal golden cobra, the uræus. Near him was his eldest son Khamuast, an able statesman, a priest, and, so it is said, a great magician. His Majesty's Libyan guards, armed with their double-edged swords, were posted about the palace.

Attending the Great Pharaoh

A messenger from Palestine arrived and was admitted to the audience chamber. He and the councilors assumed attitudes of worship when they came into the king's presence since they regarded him as the descendant of a god and himself a demigod. Kneeling, with their faces close to the floor, they gave him their news and heard his answer. Another messenger came to tell Rameses that there was a famine in some distant province; yet another brought word of a convoy of gold that was on its way from Ethiopia.

We ask the noble to tell us more of Rameses II and he agrees willingly. Rameses, while still a boy, had been associated with his father Seti I in the government of Egypt. When only ten years old, he was sent to the wars in Syria and a little later went to subdue the turbulent tribes of the lands watered by the upper Nile This he did successfully. Rameses was a great warrior and after he became Pharaoh led an army against the Hittites in Syria. The chariots were under his own command, and by his bravery he succeeded in turning the battle of Kadesh from a defeat into a victory.

Prosperous Reign of Rameses II

Much of his vast wealth was spent on building operations. As well as raising huge temples, he had the irrigation canals of the Nile delta repaired and extended and established caravan stations along the route to Ethiopia. Rameses was one of the greatest of the Pharaohs. Egypt was peaceable under him; the people were prosperous and the police efficient.

THE SPHINX AND THE PYRAMID

Two Mighty Monuments of Bygone Ages

In the preceding chapter we tell of the marvels of ancient Egypt with the exception of two that are perhaps the most fascinating—the Great Pyramid and the Sphinx. The oldest example of a sphinx is the Great Sphinx at Gizeh, which is 50 feet long. But the sphinx was not peculiar to Egypt for, as we shall read in this chapter, there were also Greek and Assyrian sphinxes which, however, differed greatly from those of Egypt. The pyramids also are not confined to Egypt for gigantic monuments of this type are to be found in the Sudan, in Algeria and even in Mexico. The largest of these monumental structures is the Great Pyramid of Gizeh which is the sole survivor of the "Seven Wonders of the World."

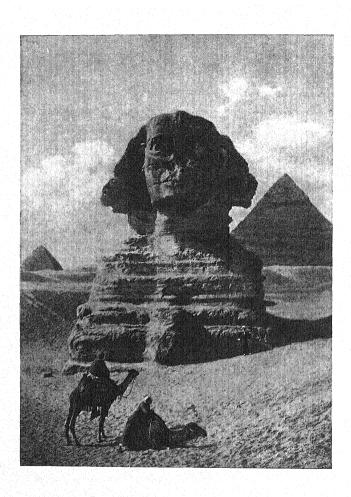
FROM the Nile at Gizeh we may see dark against the cloudless sky of Egypt, three immense tombs like shapely mountain peaks built in the desert by man. If we approach them, we find nearby a huge battered monster of stone. It is to this group of remains that we usually refer when we speak of the Pyramids and the Sphinx. But there are other pyramids and other sphinxes which, though perhaps less famous, are not less interesting. These are to be found not only in Egypt, but also in lands thousands of miles across the seas.

"Sphinx" is a Greek word which means the "throttler." It was used to designate a terrible being which had, so it was said, the head of a woman, the body of a lioness and wings. According to the ancient legend, she originally lived in Africa, but was sent by the gods to Thebes in Greece to punish the sins of a Theban ruler. Taking a rock near the city for her abode, she asked every passer-by a riddle. "What walks on four legs in the morning," she would demand, "on two at noon and on three in the evening?"

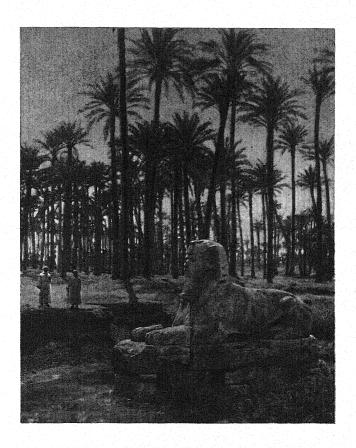
All who could not guess were devoured, and everyone failed until Oedipus came. He was able to tell the Sphinx that the answer was, "A man"; because, as a baby, he crawls on hands and knees, in the prime of life he walks upright, and when old age makes him feeble he can only progress with the help of a stick or crutch. Since her riddle had been solved, the Sphinx threw herself from her rock and the Thebans were never troubled by her again.

Thus we see that the Greeks believed their Sphinx to be an evil monster preving upon mankind. When they came to Egypt and there saw huge carved figures that were half-beast and half-human, they called these sphinxes too. But although it was at one time thought by the Egyptians that sphinxes roamed the deserts, they were more generally accepted as symbols of the grandeur and power of the Pharaohs. Their most notable characteristic was their superhuman dignity. Their bodies, made like those of lions, represent might and nobility, and their heads are usually portraits of ancient kings. Sometimes, instead of having a man's head, they had that of a ram like those at Karnak, and there are some that were made with the head of a hawk. To the Egyptian this did not detract from their dignity for a ram was emblematic of the great god Ammon, whom they worshiped, and a hawk was symbolical of the king as a warrior.

It might be asked here: What is a sphinx, since it had all these forms? It is not merely a monster with a body that is partly beast and partly man. A mermaid is not a sphinx, for example; nor are the winged bulls with the heads of bearded men that we find in Mesopotamia; nor is the Hindu god Ganesha, who is represented as having a man's body but an elephant's head. We may take it as definite that true sphinxes have a lion's or a lioness's body and a head which is either a portrait or symbol of a human being or god. Whatever other character-



ITIE GREAT SPHINX at Gizeh is the oldest and most famous of all sphinxes. It is probable the oldest statue in the world, but no one knows exactly when it was carved, or which Pharaoh the huge head represents. To-day one may see the mammoth paws of the sphinx, for the exercise the exercise share uncovered them. The statue has also been repaired and strengthened.



AN ALABASTER SPHINX, almost perfectly preserved, was discovered in 1912 on the site of the ancient city of Memphis. It was probably carved about 1240 B.C. during the reign of Rameses II. The sphinxes were given their name by the Greeks, quite incorrectly as it happens for the Greek sphinx is a demon and not, like the Egyptian, an emblem of majesty.



THE GREEK SPHINX HAS WINGS AND A WOMAN'S HEAD

The Egyptian sphinx is always male and wingless; the Greek sphinx is female with the body of a lion and the wings of a bird. According to an old Greek legend the Muses had taught her a riddle which the Thebans must answer. All who could not solve it were carried off to be eaten. When Edipus gave the correct answer, she killed herself by falling from a rock.

istics they may have are purely incidental. So we would not consider the kneeling rams found in Egypt as sphinxes, although in appearance they closely resemble them.

The great sphinx at Gizeh, which has been mentioned already, is the most celebrated of its kind. For centuries it has been considered a thing of awful mystery. Indeed, it was once thought, quite

wrongly, to be an idol of such importance that Arab invaders, in their desire to spread Mohammedanism and to do away with all other kinds of worship, deliberately disfigured it. But in spite of their fanatical efforts at destruction and of the ravages of time, the sphinx is still beautiful, and its size makes it extremely impressive.

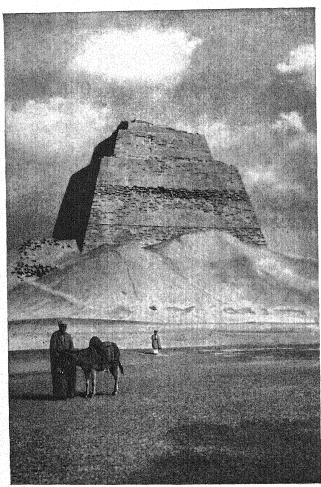
At Karnak we may see long avenues



METROPOLITAN MUSEUM OF ART

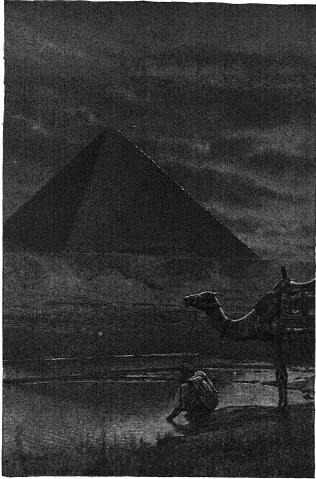
THE SPHINX IS A SYMBOL OF KINGLY POWER

A true sphinx, with the body of a lion and the head of a Pharaoh, was, in the ancient myths of the Egyptians, a symbol of the sun god with whom the Pharaoh was identified. These figures were placed at the ent ance of the temples. The sphinx shown here has the conventional lion body and the head of King Sesostris III, of the 12th Egyptian dynasty, 2000-1788 B.C.



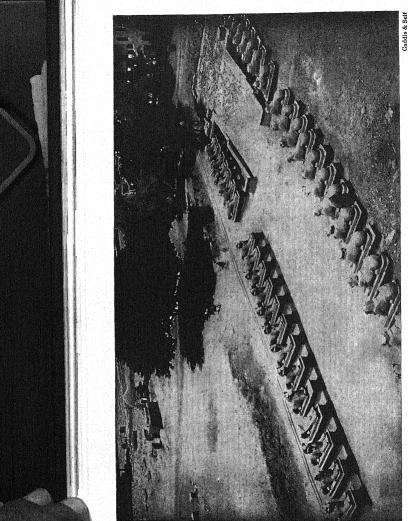
SIR FLINDERS PETRI

AT MEDUM, on the desert's edge, forty miles south of Cairo, is the queerly shaped pyramid of King Sneferu. It rises in three tiers from a mound that is really another tier covered with debris. Most likely it was once a true pyramid in shape. King Sneferu built for himself another pyramid at Dashur, but it was probably in this one that he was buried.



MC LEISH

THE GREAT PYRAMID, most famous of the group at Giza, covers nearly thirteen acres and rises to a height of 450 feet. From a narrow opening in the northern face a passage leads to several rooms. One contains a stone box, which most experts think is the sarcophagus, or tomb, of Khufu, or Cheops, an Egyptian king who reigned in the twenty-ninth century B.C.



ROWS OF SPHINXES THAT LINE THE APPROACH TO THE GREAT TEMPLE OF AMMON AT KARNAK

Chappe 65 we read about the great varied temples at Karnak, in Egypt.

Here we see one of the avenues of sphinxes that lead to them. It is two hundred feet long and once led to the riverside. The Nils now flows, however, some distance away, for it has changed its course since then.

TO THE GREAT TEMPLE OF AMMON AT KAKNAK

The Egyptian sphinx is a crouching lion, usually with the head of a
man. These have rams' heads, because they line the approach to the
Temple of Ammon, a great god who in primitive times was worshiped
in the form of a ram. Some sphinxes have hawks' heads.

lined with sphinxes. Some, as we have already said, have the heads of rams; others are like representations in miniature of the sphinx at Gizeh. All are wonderfully wrought. Splendid indeed must have been the effect when the rows were complete and the shapely figures were yet unspoiled by weather and hard treatment. One of the most beautiful sphinxes ever discovered is that which stands on the site of the old city of Memphis. It is of alabaster and is extraordinarily well preserved, so that we may study the grace of its lines and the serene and kingly expression on its face.

Sphinxes of Other Lands

The ancient Assyrians also had sphinxes, but like the Greeks represented them as having wings and considered them to be demons. Although they have lions' bodies, these creatures are far from being noble or stately. Their faces are incredibly foolish for they have great staring eyes and are usually smirking. Those of the Hittites, who lived in Asia Minor, are more ferocious in appearance but are stiff and conventional. Some have two heads, and they resemble an ordinary lion to which a human head has been given in addition to its own.

In Central America, among the carvings of the ancient Maya peoples, are some monsters that are not unlike sphinxes. We see, therefore, in how many different lands the conception of this strange type of imaginary creature met with acceptance.

Let us now turn to the Pyramids. Pyramids were usually erected to glorify the dead. In prehistoric times, the people undoubtedly marked the graves of their dead with poles and brushwood and possibly a covering of loose stones. Later, these rude constructions developed into the Pyramids, which were elaborate monuments built over burial places. In the majority of cases, the bodies were placed deep in the earth beneath them and not in the heart of the structure as one might suppose. Some of the chambers above were used as a storehouse for things the deceased might need hereafter.

The Famous Pyramids of Egypt

The Egyptian pyramids are the most famous. They were the tombs of kings and sometimes of queens and other important persons. Most have the perfect, symmetrical form of those at Gizeh. In others we see a series of great "steps" ascending to the summit. This type is constructed of several lofty tiers of masonry, each of which is smaller than the one immediately below it. The most interesting example is the pyramid of King Zoser at Sakkara, which is especially worthy of note, because it is probably the earliest that still survives. It is almost six thousand years old. Another very ancient tomb, the pyramid of Sneferu at Medum. which we see on page 84, is constructed on a somewhat similar plan.

The pyramids were usually of stone, though a few built of bricks are still to be seen. These are generally of comparatively recent date and, like that at Dashur, are in a ruinous condition. The sizes of the pyramids vary. There are examples small enough to be almost insignificant, and there are immense structures like those at Gizeh.

Everyone has heard of these three wonderful monuments, and an infinite variety of fantastic theories as to their purpose has been advanced. Actually, however, the smallest is the burial place of King Menkaura, the medium-sized one that of King Khafra and the largest that of King Khufu. The smallest is also the most modern, but it is nearly five thousand vears old.

Within the Great Pyramid

Let us visit the pyramid of Khufu—the Great Pyramid, as it is called to distinguish it from its neighbors. Although from a distance its sides appear even and unbroken, when we approach it we see that it is composed of vast blocks of stone, most of them higher than a man and some weighing many tons. Imagine the work it must have been to bring over two million blocks by boat across the Nile, then to have transported them, probably along greased roads, and to have placed



THE PYRAMIDS OF GIZEH, it has long been thought, were built by thousands of wetched slaves, driven to periom a supendous task by their tyramical rulers. It is now considered more likely that the Pharaohs who ordered their construction were conferring a great bene-

fit upon their subjects. The three months of the year during which the NMie was in flood were a time of great hardship, for no agricultural work could be done. Then the peasants were set to work upon the pyramids, and were fed and housed at the king's expense.

THE SPHINX AND THE PYRAMID

them in position by means of pulleys and ropes. And so accurately was it done that the base lacks but a fraction of an inch of being a perfect square. Such was the engineering skill of the early Egyptians. Each of its sides measures about 755 feet, and its height is about 451 feet. But these bare measurements give little idea of its majesty-it is one of the most magnificent tombs in the world.

Now, as has been stated, the burial chamber was usually underground, beneath the pyramid. There is such an apartment below the Great Pyramid, but it is unfinished, and the real burial place is within the colossal mass of masonry. If we enter the passage which opens upon the north face of the pyramid, we ascend for some distance before we come to the grand gallery, from which, turning southward, we can reach the so-called Queen's chamber. If instead we continue to climb, however, we reach an antechamber and

then the King's chamber.

In it is a huge empty sarcophagus, carved from a solid block of granite. Indeed, one of the few disappointing features of the Great Pyramid is the fact that it contains so little. It was entered ages ago by tomb robbers. The King's chamber is ventilated by channels leading to the open air.

Other ancient peoples must have been profoundly impressed with the desirability of pyramids as tombs. In the Sudan, as we show on page 80, small varieties are found, while in Algeria there are large tombs which have obviously been evolved from Egyptian pyramids.

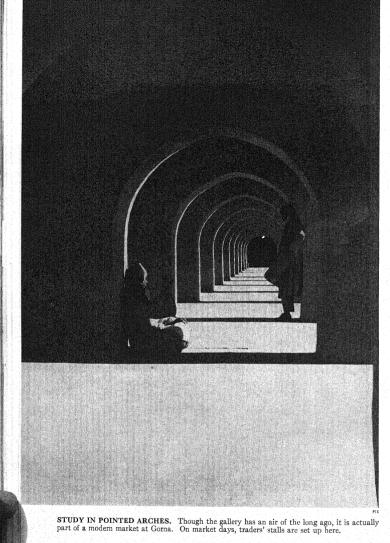
In America there are also many pyramids, but these were constructed for entirely different purposes. The Mayas set temples upon them, and thus gave an appearance of importance and stateliness to their religious buildings. In Mexico there is one massive structure, the pyramid of the Sun at San Juan Teotihuacan, that almost equals those of Egypt in size. It is built of adobe and is faced with stone and stucco. There are also many that are smaller, but very elaborately finished. All are more squat than the Egyptian pyramids and have steps to their summits.



town that was once the contains about 200 small BURIAL GROUND OF their imitators we can see from this in ruined Meroe, an ancient Nubian FLAT-TOPPED PYRAMIDS THAT MARK THE Egyptians had i That the ancient photograph of a SMALL

EGYPT'S ETHIOPIAN IMITATORS

capital of l pyramids,



EGYPT TODAY

The Republic on the Nile

The first thought of Egypt (Misr in Arabic) is likely to call up a picture of the Sphinx, the Pyramids or of temples built thousands of years ago. Though the past has left an indelible stamp, the Egypt of today is as vital and interesting as ever it was in the days of the pharaohs. For the first time in its incredibly long history as a nation, Egypt is no longer a monarchy but a republic. It is also one of the strongest nations in the Middle East. The modern Egyptians and how they live, the Nile Valley as it is in the twentieth century—astir with a new vision of the future—all will repay better acquaintance.

HE Egyptians have a rich heritage. For centuries, people from all around the Mediterranean and even from more distant places have been settling on the green banks of the Nile, Hyksos, Hittites, Assyrians, Persians, Macedonians, Romans, Arabs, Crusaders, Turks, French and British-all invaded Egypt by way of the Nile Delta. Ethiopians invaded Egypt from the south. Many of these came as conquerors, with an eye on Egypt's strategic location. Others came as merchants, drawn by the favorable position on world trade routes. others came to farm the fertile soil of the flood plain. Once there, the newcomers found it difficult to stay aloof. They adopted the customs of the Egyptians, ate the same kind of food, played their games and worshiped in their temples.

When Alexander the Great conquered the known world of his time, he established the seat of his empire in Egypt. He built Alexandria, which became the jewel of the Mediterranean. He worshiped in the temple of Amon. On his deathbed his last wish was that he should be buried beside the temple of his god,

Amon of Siwa.

As a result of all these waves of conquest, occupation and settlement, Egypt has long been a melting pot of a variety of ways of life, some of which enriched the nation while others impoverished it.

The advent of the Arabs in A.D. 640 was the outstanding single event affecting the very foundation of Egypt's life. For they brought with them Islam, the religion founded by Muhammad. The Arabs

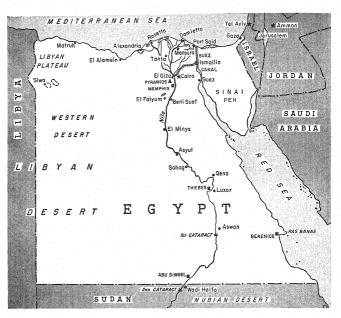
were completely absorbed into the rest of the population. Soon, Egypt became a Muslim and Arabic-speaking country, Islam is not merely the predominant faith in Egypt; most of all it is a way of life for Muslims (who do not call themselves Mohanmedans). Thus, in order to understand the Egyptians and their culture, one must first understand something of Islam.

For more than six hundred years after the Arabs came to Egypt, different Arab-Egyptian dynasties ruled over the country with varying degrees of benevolence and constructive achievement. Public works, agriculture, trade, architecture, education, art, science and literature all flourished to

a degree unequaled before.

Cairo (Al Quahirah), was founded in A.D. 969, and in the following year the Al-Azhar Mosque was built. Though Al-Azhar started only as a mosque, it soon grew into a university also, today the oldest in the world. It was (and still is) the most prominent institution of learning to preserve Islamic theology and the Arabic language and literature, especially during the dark ages that engulfed Egypt some time after the Crusades. These long exhausting wars left Egypt weak and poor.

In A.D. 1250 and for 267 years thereafter, the country fell an easy prey to the Mamelukes (Mamaleck)—imported Circassian bodyguards of the Egyptian sultans—who usurped the power of their masters. While the feudal Mamelukes lived off the fat of the land in extravagance and luxury, occupying themselves with intrigues and feuds, Egypt was sinking gradually into an abyss. The main



sources of her livelihood were severely neglected; irrigation systems were left to deteriorate, and much of the cultivated land reverted to swamps and desert, Education and science suffered. Worst of all, the Egyptian people were excluded for that long period from any say in running national affairs. They became almost strangers in their own country. So there developed an attitude of indifference, an attitude that permeated Egypt's political and social life for some time to come. The foreign rule that followed perpetuated this negative frame of mind.

The Turkish occupation, begun in 1517, lasted for 270 years. Among its other ill effects, it drained Egypt of her best artisans and craftsmen, who were sent to work for the sultans in Constantinople. High tribute was exacted, which meant a heavy load of taxes on the oppressed, already poor Egyptian farmers.

The coming of the eighteenth century brought to Egypt a different, yet still bitter, taste of world struggle for power. The French, under Napoleon Bonaparte, occupied Egypt in 1798 but were forced to give up their stronghold after three years when the British destroyed Napoleon's fleet at Alexandria. New horizons now seemed to be opening up for Egypt.

The pendulum, however, swung back toward Turkish domination. In 1805, Muhammad Ali, an Albanian soldier in the Turkish army, gained control of Egypt. He declared Egypt's semi-independence from Turkey, and his family ruled the country for the next 147 years. That dynasty, last of which was Farouk, simulated the traits of the Mamelukes, however concealed in a nineteenth-century cloak.

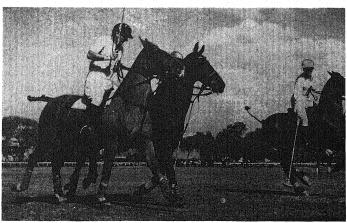
Egypt's position, where three conti-

nents come close together, has been both a curse and a blessing. On the great trade routes between East and West, the country has always profited from international commerce. At the same time, men who have dreamed of world conquest have realized that they must first hold the shores of the Mediterranean-and, hence, Egypt. As we have seen, Alexander the Great did win Egypt. Napoleon did not fight the British in the English Channel but decided he would do better by cutting their trade route to the East-in Egypt. Hitler, like Napoleon before him, fought and lost a decisive battle with the British. not in England, but at El Alamein, in Egypt.

Though always in a commanding location, Egypt's importance to the world at large was increased by the opening of the Suez Canal in 1869. The significance of the canal—a link in the lifeline to Eastern possessions—was not lost on the British. In 1882, not long after the canal was opened, they occupied Egypt and remained there for about seventy years. In 1954, they signed an agreement to pull out their last troops, from the canal zone, by 1956.

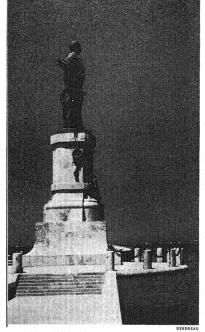
Though political awareness among the Egyptians was being sharpened by occasional friction with occupation authorities, it was slow in developing to the level of strong, united public concern. Any trend in that direction was not encouraged by those in power. With the years, hopes focused on the goal of complete independence from foreign rule and an end to corrupt home government. On July 23, 1952, with a bloodless revolt led by twelve young army officers, a new era began in Egypt's history. Three days later, Farouk was deposed. On June 18, 1953, Egypt was declared a republic.

What are the Egyptian people like today? It is hard to distinguish one whose ancestors were Arabs or Turks from one whose forebears were the original inhabitants. There is, however, a general gradation in skin color. The northerners who have been living for generations in the mild climate of the Delta are for the most



EGYPTIAN STATE TOURIST ADMINISTRATION

THE THUD OF HOOFS and the crack of mallets. Egyptians excel at such games as polo. Also, for centuries, Egyptian fanciers have been breeding fine horses such as these.



FERDINAND DE LESSEPS statue overlook-

part lighter in complexion than those who have been browned by the baking sun of the south. The reason for this is not merely a difference in climate. Northern Egypt is a well-trodden crossroads of the world, where all the invaders, save the Ethiopians, passed.

ing the Port Said entrance to the Suez Canal.

Besides the Muslims in Egypt, there are great numbers of Christians and Jews. A relatively high percentage of the Christians is found in southern Egypt and in large cities. People of the Jewish faith live mostly in metropolitan centers, such as Cairo and Alexandria. Muslims, Christians or Jews, they are all Egyptians. They have similar, if not identical, social customs, occupations and cultural backgrounds.

For centuries, mosques, churches and

synagogues have stood side by side all over Egypt. The chanting voices of muazzins, calling atop the minarets for the Muslims to pray, often mingle with the ringing bells of neighboring churches. Religious holidays such as Christmas. Rosh Hashana and the Muslim New Year are recognized by the Egyptians at large. Interfaith marriages are common occurrences. Followers of the three faiths have served as the highest officials of the land as well as business and civic leaders. Muslims learn from their Holy Book, the Ouran (Koran) of the similarities between Islam. Christianity and Judaism. Muslims believe in the Golden Rule; in life after death; in the revealed Books (though interpreting them somewhat differently from either Jews or Christians); and in all the prophets, considering Jesus and Moses as such. Muhammad, the founder of Islam, is believed to be the last of the prophets.

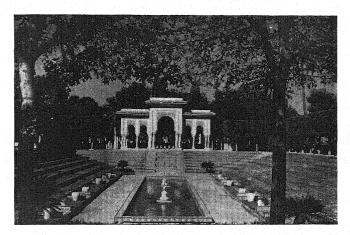
to be the last of the prophets.

Muhammad claimed to be simply a messenger of God. Islam to its followers means peace and submission to the will of God. Its teachings are simple and direct. "Religion is good deeds and decent behavior" were the words of Muhammad defining his creed. The faith is based on belief in the oneness of God (Allah in Arabic) and in the brotherhood of man. Muslims believe that each individual is directly responsible for his actions to his Creator. There is no priesthood in Islam.

It is interesting to note that about 3,500 years ago, the Egyptian Pharaoh Akhenaton initiated the earliest known religion based on belief in one God. His hynns are thought to have been a source of inspiration to the Hebrews. Many scholars regard the Great Hymn of Aton as the origin of one of the Psalms.

Along with history, government and religion, the Egyptians have also been profoundly influenced by the nature of their land. In the fertile valley where the life-giving Nile flows, agriculture is all-important. It represents the greater part of the national capital, labor and income.

The farmer, fallah, who makes up the majority of Egypt's population and constitutes the backbone of her economy,



AN ENCHANTING TERRACED GARDEN built around a pool and partly enclosed with severely clipped hedges. The Egyptians love gardens and parks and keep them in perfect order.



PHOTOS, EGYPTIAN STATE TOURIST ADMINISTRATION

THE CURVING BEACH at Alexandria, Egypt's second largest city. Visitors throng the strand to bask in the warm sun or to take a dip in the sparkling Mediterranean waters.



EGYPTIAN STATE TOURIST ADMINISTRATION

A "FALLAH," OR FARMER. Though men like him are the backbone of the nation, they were long neglected. Today, land reforms are giving the farmers hope of bettering their lot.

lives a simple and hard life. He works in his field from dawn till dusk, laboring with implements such as his forebears used six thousand years ago. He still irrigates his land by a sakiah, or water wheel, turned by a water buffalo he calls a gamousah. The gamousah plows his field, threshes his wheat and gives him milk as well. The farmer's mud-brick house is the same type in which his ancestors dwelt long ago. Through his long, tedious work in an old-fashioned, humble environment, the farmer cultivates virtues of patience and steadfastness. Although the majority of farmers cannot yet read or write, they have a keen grasp of what goes on around them.

In the little farming villages on the banks of the Nile, co-operation is part and parcel of the community's life. Even a gamousah may be shared. Overwhelming generosity and hospitality are deeply imbedded social traits of the Egyptians, no matter how meager and humble their means. A stranger can hardly pass by a farm or a village without being invited into a home and offered all available com-

fort. If the host has only one chicken to his name, it is not too much to place before his guest. (Muslims neither eat pork nor drink alcoholic beverages.) Courtesy and friendliness may be carried to great lengths, in the spirit of the Good Samaritan. Should a stranger ask a passer-by for directions, he may receive not only the needed information but find himself accompanied to his destination by an eager and willing guide.

Farms and small towns represent the basic way of life of the Egyptians. In the big cities, such as Alexandria and Cairo, there is interesting variety and contrast: the ancient and modern, native and foreign, Western and Eastern, all blend to make a colorful society. Where once only slim, lofty minarets etched the skyline, today there are also imposing modern skyscrapers. The latest cars, taxis and buses ride bumper to bumper on straight, wide, asphalt-paved boulevards. Along the old, winding, narrow streets, they may be squeezed in by horse-drawn carriages and donkey carts. From the clear blue skies above, one may hear the



MODERN AGRICULTURAL EQUIPMENT, such as this tractor, means increased production from the fertile Nile soil-tilled and irrigated in the past by human and animal labor.

roaring whir of fast transoceanic planes or the zoom of supersonic jets, taking off from or landing at nearby airports, among the largest and best-equipped of their kind.

Midst all the bustle of twentieth-century transportation, the placid Nile remains an important shipping route. Felukas-boats with huge white sails like the wings of a butterfly-still slowly swish up and down the river, carrying goods as they have from time im-memorial. Nor can the rumblings of the swift streamlined trains, hugging the meandering banks of the waterway, quite drown out the singing of villagers making their way afoot or on the backs of animals along country roads.

It was in 1853 that the first train left Alexandria for Cairo. Egypt was the fifth country in the world and the first in the East to establish the railway train as a common means of transportation. Popular stories to the contrary, the camel is not among such means of traveling in the inhabited parts of Egypt. Though camels are used by farmers to carry products to

market, the overwhelming majority of Egyptians have never ridden one. realm of the "desert ship" has been the vast Sahara. But even there, it is being replaced by the four-wheeled metal horse.

Suppose we take a stroll down a city street, say, in Cairo. We pass a dignified white-turbaned sheikh, his colorful robe swinging in the rhythm of his stride. With him is an Ibn balad (son of the town) dressed in a white cap and a gallabiyah, which looks like a night shirt. They rub shoulders with men welltailored in Western garb, one wearing a regular hat, the other a red fez, or tarboosh. In the throng are two attractive women, the younger one smartly attired in the latest Paris fashion, the elder in a more conservative costume, her head swathed in a scarf. Sauntering nearby is a woman draped in yards of black fabric extending over her head but not over her face. Today fewer and fewer women still cover the lower part of the face. When they do, the "veil" is really an ornate wide-meshed net material, which is attached to a golden nosepiece. Far from

hiding a woman's charms, the arrangement accentuates them

One must search far and wide to find a truly veiled woman. The regressive custom, which was introduced into Egypt during the Mameluke and Turkish rule as a mark of class distinction, is now almost something of the past. Women on farms have always worked side by side with men and have never been veiled. Contrary to a widespread misconception. Islam does not require women to be veiled, secluded or subservient to men. A Muslim woman may earn her living by any honorable means, and no one, not even her husband, has a right to her income or property unless she so desires. After marriage she continues to be known by her maiden name and her identity re-



TAMBOURS, or Archimedes' screws, are giving place to mechanical pumps for irrigation.

mains intact. Today, in Egypt, there are women lawyers, university professors. teachers, nurses, dentists, surgeons, physicians, office workers. Eventually, all the obstacles to women's social progress created by custom must give way. The only standard established by Islam in this regard is a strong admonition that a married woman who works outside her home must always remember her sacred obligations to her husband and, most of all, to her children. If there is any conflict, the family must come first.

In the city, however, the man is generally the sole bread winner, and the woman is queen of her home. Keeping house is a full-time task. From childhood Egyptian women are trained to be good wives, loving mothers and excellent Many housewives enjoy the pleasure and comfort of washing machines, refrigerators, electric and gas stoves, pressure cookers, vacuum cleaners, air conditioners and other modern appliances, but the majority cannot afford

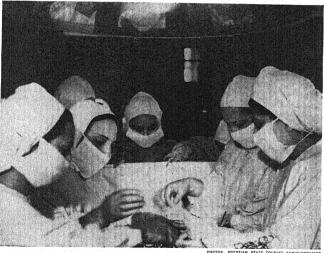
such luxuries

The bonds among the members of a family are very strong. The ties extend even to the most distant kin. Islam makes it a duty for an individual who is capable financially and otherwise to provide for needy relatives, even more so if they are women. Obedience, respect and veneration for one's elders, especially parents and particularly mothers, are summed up in the saying of the Prophet Muhammad that "Paradise is under the mothers' feet." This is not a one-way devotion. The parents' love for their children may be shown by affectionate pet Thus Abu Ahmad and Um Ahmad-"the father of Ahmad" and "the mother of Ahmad"-often become names of endearment used by the parents' friends

Let us return to our city street. Regardless of the season, there is a never ending variety of delectable fresh fruit for sale, and markets overflow with the gifts of the Nile climate and soil. There are several kinds of scented grapes; succulent figs and pears; sugary dates and pomegranates; creamy guavas; sweet mul-



A PRETTY FARM GIRL carries a great sheaf of clover to feed her goat. On the farms, every member of the family has a job to do. Children help before or after school.



SURGICAL MASKS take the place of veils for these modern Egyptian women—a surgeon and her staff. Many professions have opened their doors to the distaff side of Egyptian life.

berries and strawberries; juicy oranges, tangerines, limes, lemons and grapefruit; delicious mangoes and prickly pears; luscious peaches and apricots; cool, thirst-quenching watermelon. Street vendors sing out their wares. "Apricots, pink-cheeked, tender; who will be the lucky



UNESCO

A MOTHER and a visiting nurse smile happily, both proud of the baby's robust health.

spender?" chants one. Another echoes him in the same rhythm. "Oh mangoes, luscious and sweet, come enjoy them, what a treat!"

Street cries, the clang of tramways, the jingle of bicycle bells, the toots of automobile horns, all suddenly cease on Friday at noon if there is a mosque nearby. This is the hour when Muslims come together for prayer. After performing the required ablutions, the faithful not only crowd every inch of the mosque but spread outside into the streets where they stretch rugs, mats and even newspapers, to secure a clean surface upon which to kneel and pray. Standing shoulder to shoulder in straight rows, they recite verses from the Quran, praising and glorifying the Creator. They kneel and

prostrate themselves, putting their foreheads to the ground in token of their submission to God. Man-made distinctions fade away, for the worshipers believe all are equal in the sight of their Maker. Muslims pray five times a day, either alone or preferably in groups, where they are constantly reminded of the ideal of brotherhood.

Taking refuge from our Cairo street, which by now may be sunny and hot, we enter one of the air-conditioned department stores. On display are the latest fashions from Paris, London and New York. Just a stone's throw away are the exotic "Arabian Nights" bazaars of El-Mouski and Khan El-Khalili. Within their mazes one steps into another world, centuries old. Along the narrow alleyways are small shops where skilled craftsmen work patiently on gold and silver jewelry-some of it delicate filigree and some enhanced with precious or semiprecious stones. In other shops are copper and silver trays; rugs; tapestries; wooden work inlaid with ivory, ebony and mother of pearl; amber prayer beads; leather cushions and bags; silk brocades.



EGYPTIAN CO-EDS. All branches of learning are open to women university students.



AL-TAHRIR SQUARE, a spacious center in the modern part of Cairo. The building houses government offices. Also on this square is the famous Egyptian Museum, with priceless relics.

From the bazaar of perfumes is wafted the fragrance of roses, jasmine, musk, lotus, saffron, violets, magnolias, carnations, gardenias, lilacs, narcissus, peonies and lilies of the valley.

Leaving the bazaars, we come upon gardens and parks bursting with bloom. In the welcome shade of the trees, families are picnicking, playing or relaxing.

Sports clubs and stadiums offer more Soccer active forms of recreation. matches are especially popular in Egypt. Egyptian athletes excel in hockey, polo, weight lifting, wrestling, swimming, basketball, shooting, cycling, fencing, calisthenics, horseback riding, tennis and squash rackets. For more than twenty successive years, Egypt held the title of world champion in squash rackets. Egyptian swimmers have crossed the English Channel more than once and have broken world records. Heavy and middleweight lifting championships also have been among Egyptian trophies.

For children, there are circuses, merrygo-rounds and swings. Like boys and girls the world over, Egyptian youngsters play leapfrog, tag, hide and seek, hopscotch, marbles, walk on stilts and jump rope.

After dusk, Alexandria and Cairo twinke with myriad lights. Some of the
illumination comes simply from lanterns.
Neon signs on night-club marquees, theaters, movies, restaurants, cafés, shops
and department stores make "white
ways" of the main thoroughfares. Most
picturesque are the slender minarets when
girdled with bracelets of light to beckon
the faithful into the mosques for prayer.
The minarets are lighted at festival time
and all through the nights of Ramadan,
the Muslim month of fasting.

This month has special significance for Muslim Egyptians. From moon to moon, or for about thirty days, adult Muslims fast from dawn till sunset. During those hours they neither eat nor drink, nor do they indulge themselves in any other way. Ramadan is "the month of generosity, piety and good will," some of the Muslims' ideals.

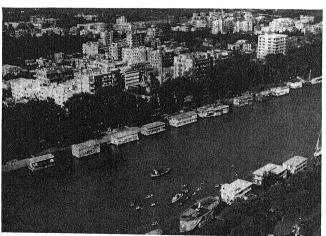
Ramadan is a particularly happy month for the children, who anxiously look forward to its entertaining evenings, special pastries, nuts and sweetmeats. After sharing a sunset breakfast with their parents, groups of them go out swinging tiny multicolored glass lanterns and chanting the traditional songs of Ramadan. The end of fasting is observed by donations to the poor. Then there are merry celebrations for all.

Similar festivities take place on the Muslim New Year, on Muhammad's birthday and on the day solemnizing the vearly pilgrimage to Mecca. This last occasion also commemorates an event related in both the Bible and the Ouran, signifying the supreme test of man's submission to the will of God. Abraham was about to sacrifice his beloved son in fulfillment of the Lord's command, when it was revealed to him that a sheep would suffice. The Muslims therefore offer a lamb and bestow the greater portion of it on the needy. Besides, the Muslims pay alms to the poor from their savings and invested capital. This is not considered charity but a duty enjoined upon the Muslims by the

Quran. Such a tax for the poor is over and above all other taxes that the state may levy, and is set apart for those who need help.

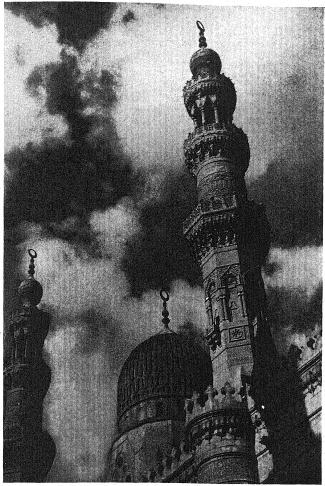
Now that Egypt has stepped over the threshold into a new era, there is an even greater need to settle the accumulated old problems. Many steps in the right direction, such as land reform including a more just distribution of land, have already been taken, but many more are necessary. A long-standing difficulty is the fact that the population is increasing steadily without a corresponding rise in cultivated land or in land productivity. More than oo per cent of the country's total area is still uninhabitable desert. Egypt's economy and foreign exchange have long been critically dependent upon one crop: longstaple cotton (the finest in the world). Industry and other national resources have been neglected.

The condition of the average farmer is still far from satisfactory. Illiteracy has



EGYPTIAN STATE TOURIST ADMINISTRATION

"CLIFFS" of modern apartment houses rear above the ancient Nile while along the banks are moored houseboats—the dahabeahs that have long been a feature of Nile River life.



EGYPTIAN STATE TOURIST ADMINISTRATION

A MAGNIFICENTLY CARVED MINARET towers against the sky, symbol of Egypt's chief religion, Islam. From the minarets, muazzins call the Muslims to prayer five times a day.

been high and the standard of living low. The masses of the Egyptians have had little opportunity to participate in running the affairs of the nation. Their potential gifts for self-government were left untapped for generations. Thus, like any other growing nation, the new Egypt is faced with the greatest challenge of all; that is, to learn and practice the art of democratic, representative government.

Gradually, however, more industries, with modern methods, are being developed. Projects for more hydroelectric power and wider irrigation systems are being carried out. Fertile soil is being reclaimed from the desert. Bridges, canals and roads are being built. Oil and

mineral production are increasing. Iron and steel works are also going up. Social welfare plans are rapidly expanding and include more hospitals and public-health programs, schools and other undertakings—all aimed at establishing a sound economy and raising the people's standard of living.

Egypt is on the march once more. Her dynamic progress and modern achievements are enhanced by her Islamic culture and Oriental charm. This melting pot of East and West belongs to the remote past, the present and the future. Egypt will remain as old as time and as young as tomorrow.

By ABDELMONEM SHAKER

EGYPT: FACTS AND FIGURES

THE COUNTRY

Bounded on the north by the Mediterranean Sea; on the east by Israel, the Gulf of Aqaba and the Red Sea; on the south by the Sudan and on the west by Libya. Total area: 386.198 sq. mi.; population, about 23,000,000. Cultivated and settled area (Nile Valley, Delta and oases) is only about 13,500 sq. mi.

GOVERNMENT

Formerly a constitutional and hereditary monarchy, Egypt was proclaimed a republic on June 18, 1953, ending the 147-year Muhammed Alydynasty. A Revolution Command Council exercised executive power, assisted by a cabinet. General Muhammed Naguib became the first president and premier, but was relieved in 1954 by the rulling military junta. Colonel Gamal Abd el-Nasser was made premier and charged temporarily with the responsibilities of chief of state. The old constitution was suspended. In January 1956, Premier Nasser presented a new constitution to the Egyptians, on which they were to vote in June 1956. In general, it provides for the building of a welfare state.

COMMERCE AND INDUSTRIES

The National Production Council in 1954 announced a To-year plan to increase production by further land reclamation. About 75% of the population is engaged in agriculture, which is almost entirely dependent on irrigation and is limited to about 3% of the total land area. Other industries include cotton ginning, textile milling, food processing, steel and copper production; manufacture of chemicals, fertilizers and synthetic rubber; fishing; and a thriving film industry. Chief agricultural crops are cotton, wheat, rice, sugar, onions and barley. Minerals produced include gold, phosphate rock, petroleum, asbestos, salt, building stones, manganese and cement. Chief exports: cotton, salt,

manganese, textiles, asbestos, building stones and cement. Chief imports: machinery, vehicles, timber, leather, petroleum products and coal.

COMMUNICATIONS

The Nile is the great highway and much traveling is done by boat. Railways, state-owned, have a mileage of 4,188; private companies own over 862 mi. of agricultural light railways. Length of roads is about 8,500 mi. There are international wire and cable connections, about 6,400 post offices and stations and regular airmail service. The Suez Canal, 102 mi. long, connects the Mediterranean and Red seas. Some 30 foreign airlines are served by Egypt's 11 civil airports. MISRAIR, an Egyptian airline, services the whole Middle East.

RELIGION AND EDUCATION

More than 90% of Egyptians are Muslims. The remainder are Coptic and Eastern Christians, Roman Catholics, Protestants and Oriental Jews. Elementary education is free and compulsory; secondary education also is free. Approximate number of schools: kindergartens, 402; primary, 7,400; secondary, 680; industrial, commercial and agricultural, 87; teacher-training, 114; other specialized schools, 120; art institutes, 2. The 3 state universities are Cairo, Alexandria and Heliopolis. A fourth is to be opened at Asynt. There is a UNESCO center at Sirs al-Layyan. Al Azhar University (in Cairo)—1,000 years old—is the highest authority in Islamic teachings and Arabic-language studies in the world.

CHIEF TOWNS

Cairo (capital), population, 2,500,000; Alexandria, 1,200,000; Tanta, 500,000; Mahalla el Kubra, 300,000; Port Said, 178,400; Suez, 109,800; Mansura, 108,000; Asyūt, 96,100.



E. N. W. Slarks

THE COLOR OF CAIRO

Life and Glamour of Egypt's Historic Capital

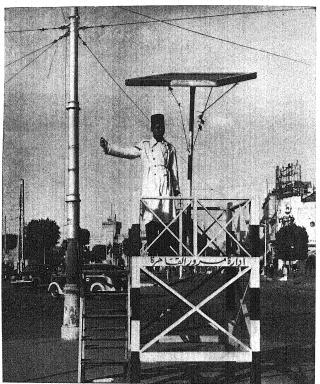
THERE is a thrill in our first sight of Egypt. We know what an ancient country it is and we are auxious to set foot upon the land which has seen so many thousands of years of interesting life. A glistening white city first meets our gaze. That is Alexandria.

We shall not loiter at Alexandria. Somewhere beyond, on the banks of the Nile, lies the city of a thousand dreams, where from a cloudless sky the sun shines down upon all the races of mankind—for Cairo is a Tower of Babel if ever there was one—and upon such strange build-

ings as are only to be found in Eastern cities.

Already, gazing from the windows of the train that takes us from Alexandria to Cairo, we feel the spell of Egypt. Here are the palms, the green plains, the groups of dusky Egyptians, the string of camels and the sad, mouse-colored donkeys.

We are eager for the sight of Cairo, but when at last we really do see it—well, it is at first rather disappointing. A railway station is usually a sad affair, even such an attractive railway station as Cairo's, and the way thence to the



PHILIP GENDREAU

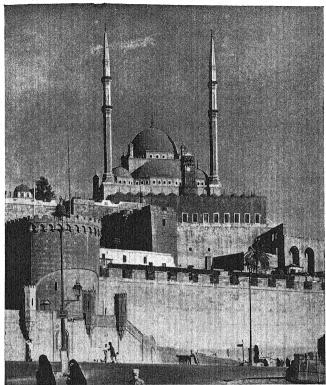
CAIRO, A MIXTURE OF OLD AND NEW

A white-clad police officer, wearing the typical Egyptian fez and holding his police whistle in his right hand, directs traffic from the control tower in Cairo's El Mahatta Square. Cairo is a city of striking variety; modern buildings and sections contrast with the ancient Oriental quarters and bazaars where, externally, little has changed for hundreds of years.

hotel is not as a rule very much better. So it is with Cairo. We must wait a little while before we find the city for the fulfillment of our dreams.

While we are waiting let us glance at Cairo's history. It is not so ancient a history as many people think. The Pharaohs, Egypt's ancient rulers, had been

dead many years and the pyramids were very old when the site of Cairo was merely waste land and sown fields extending from the Nile to the Mokattam hills. As far as it is possible to judge there were no buildings there except a couple of fortresses up to the year 641, when the Commander-in-Chief of the armies of



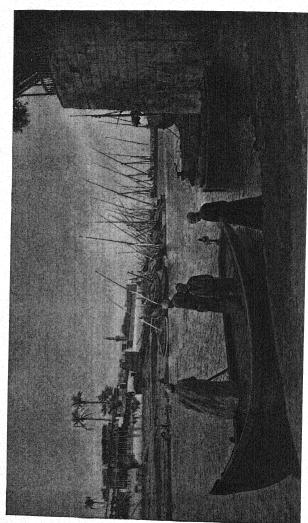
TRANS WORLD AIRLINES

THE DAZZLING ALABASTER MOSQUE WITHIN THE CITADEL

The Citadel (El-Kala), built by Saladin about 1177, is a landmark in Old Cairo. It stands on several hills. Within the walls are five mosques. This one takes its name from the gleaming stone of which it is built. Besides the mosques, the Citadel contains an extensive palace and an extraordinary well that has been bored down through solid rock for 270 feet.

the victorious Caliph Omar captured the Roman fortresses and built a town, which he called Al Fustât. This was the first Mohammedan capital of Egypt.

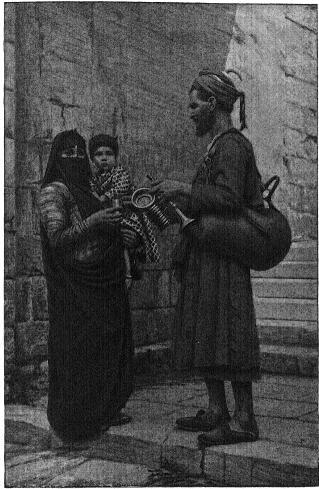
Fustât, in Arabic, means "tent," and this is the story the Arabs tell as to how the name came about. When the victorious general marched north to capture Alexandria he left his tent standing because he refused to disturb the doves that had commenced building there. On his return from the conquest of Alexandria he commanded his army to build their quarters around his tent which was still standing. From that fact the new settlement, which was the first Arab city of



CAIRO ON THE NILE is a great river port. We are here looking across the branch of the Nile between the island of Roda, on which we are standing, and that part of the city called Old Cairo. The craft moored stong the farther bank are feluces with their short masts and long, slender

spars. The stone wall on the right is part of an embankment "criming a graden. Along the top of the wall visitors walk to see the famous Numeter. This is a large stone well with a graduated pillar in the centre to indicate the rise and fall of the river.

© E. N. A



DONALD HC LEISH

THE WATER SELLER with his goat skin bottle and brass cup is one of the commonest sights although waterworks now supply most houses, and here and there one can see a public drinking pipe jutting from a wall. The people still continue the old way of doing things. A squeeze from the water seller's elbow sends a jet of cool water from the shining nozzle.



A HOLY CARPET RETURNS FROM MECCA

Each year thousands of devout Mohammedans make the pilgrimage from Cairo to the holy city of Mecca, in Arabia. It is the duty of every follower of Mohammed to go there at least once in his lifetime. The most sacred shrine at Mecca, the Kaaba, is always covered with a carpet, which is renewed annually. Here we see a carpet and its honor guard on the return journey.



PHILIP GENDREAU

A LION STANDS GUARD BY THE NILE

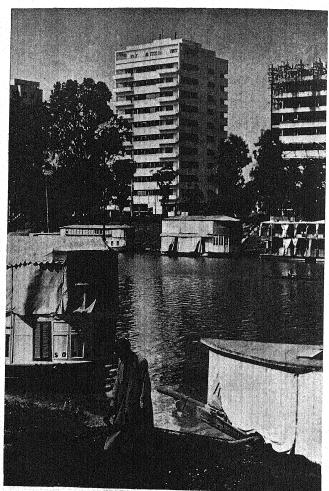
Majestic and dignified as a Pharaoh, a gigantic sculptured lion keeps a calm vigil above the restless color and noise of a typical Egyptian crowd. Near the entrance to Cairo's bridge over the Nile, Egyptians mingle, old-style and new-style. Some wear Western dress; others wear fezzes and Egyptian parb. Burdens are carried either on the head or in baskets.



IN CAIRO BAZAARS the way is blocked by donkeys and mules, carts and carriages, besides the crowds of Egyptians, Arabs, Jews, Syrians and a sprinkling of European tourists. There is always a pandemonium caused by the shouting of the coachmen and camel drivers, as they try to clear the way, and by the haggling in the shops. Awnings above the crowd give shade.



MOSQUE EL AZHAR, known as "the splendid," which can be seen at the end of the street, was converted into a university nearly a thousand years ago. Students come from all parts of the Moslem world to gain knowledge of the Koran. The enrollment is over ten thousand. Their ages range from fifteen to seventy-five for, indeed, some spend their lives here.



ISAAC JONATHAN FROM CUSHING

HOUSEBOATS ON THE NILE, where the historic river flows past Cairo. The floating homes are a fashionable way of finding some respite from the stifling heat of summer.

THE COLOR OF CAIRO

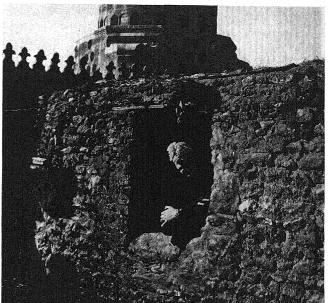
Egypt, came to be known as Al Fustât, "The Tent."

Fustât soon became quite an important settlement with mosques, palaces, barracks and the dwellings of an Eastern capital. The summer palace, where the emirs of Egypt often resorted to enjoy the cool breeze, stood on a spur of the Mokattam hills where the Citadel now stands, and another magnificent palace had been built by Ibn Tulun in the Royal suburb of Al-Katâ'i.

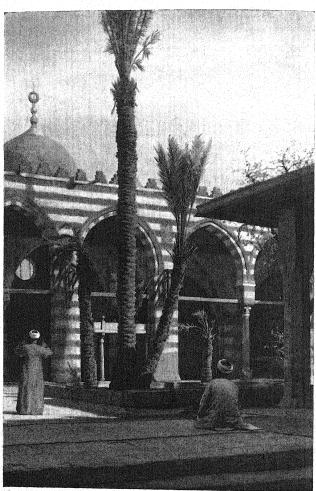
In 969 a new Arab conqueror came down into Egypt. He captured Fustât and laid the foundations of a new city. It is said that on a clear August night he marked out the boundaries of his new city on the sandy waste which stretched north-

east of Fustât, and a square about a mile each way was pegged out with poles. Each pole was joined by a rope on which bells were hung, and it was arranged that at the moment when the astrologers gave the signal that the lucky moment had arrived, the first sods were to be turned.

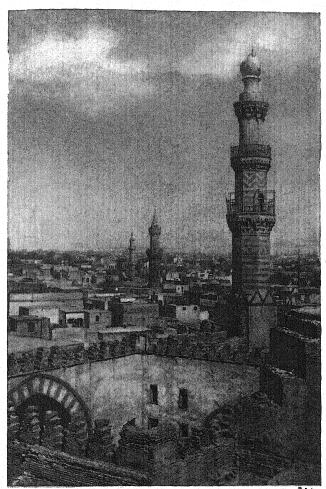
While the workmen were awaiting the signal a raven perched on one of the ropes and set the bells tinkling merrily. Straightway every workman thrust his spade in the earth and began to dig. At this moment the planet Mars, which the Arabs call Al-Kāhir, was above the horizon, and although this was looked upon as a bad omen, the raven's signal could not be ignored. The new city was called after the planet Mars, "Kāhirah"—mean-



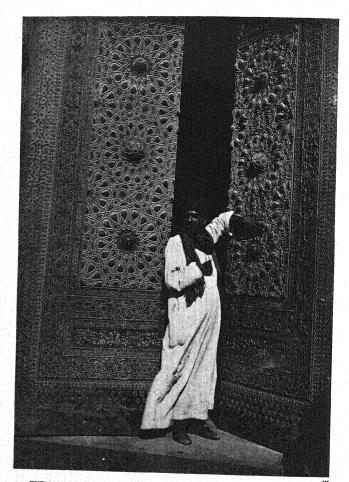
A HUMBLE DWELLING in the old section of Cairo. Built long ago of clay and stone, this hovel tells its own story of poverty and discomfort. A caliph's tomb is in the background.



BLUE PORCELAIN fashioned into tiles makes this one of the loveliest of mosques and has given it the name of "the Blue." The tiles are arranged on the eastern wall of the Liwan, or sanctuary, which the visitor sees from the palm court. There are patterns of exquisite design. "Blue Mosque," or Ibrahim Agha Mosque, is situated near the Wezir Gate



TALL MINARETS, standing up against the sky, surround us on all sides if we climb up to the flat roofs of any of the houses in the centre of the city. From the doorways opening out on the galleries of these towers, officials, called "muezzins", appear five times every day—at dawn, noon, four o'clock, sundown and midnight—to call the Faithful to prayer.



THE MOSLEMS DECORATE THEIR MOSQUES WITH ORIENTAL WRITING

Because their religion forbids drawings or sculpture of humans and animals, the Moslems decorate their mosques with fine arabesque patterns and even writing. The low panels in the bronze door of the Mohammed Ali mosque show how writing can be used for ornamentation. The letters are so crowded as to be illegible but probably the inscription is from the Koran.

THE COLOR OF CAIRO

ing "the victorious"-and out of this we have derived the modern Cairo.

Thus was founded the great City of the Caliphs, of which it presently came to be written: "He who hath not seen Cairo hath not seen the world: its soil is gold, its Nile is a wonder, its houses are palaces, and its air is soft, its odors surpassing that of aloes-wood, and cheering the heart, and how can Cairo be otherwise when it is the mother of the world?"

Just one word more on Cairo's history. It was captured by the Turks in 1517, by the French in 1798, by the British who handed it back to the Turks, in 1801, and in 1882, it was again taken by the British.

Until the year 1883 Cairo was a very fair specimen of a large Oriental city, where Eastern life and character could be observed with delightful ease. It was just an Eastern city, and nothing elsedecayed palaces, dusty streets, a considerable amount of filth and that endless variety of color of which no Western institutions may ever rob it.

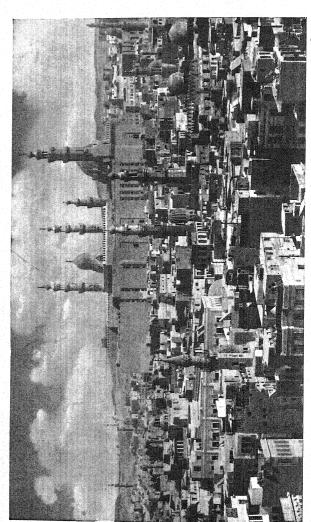
The people were tolerant, and became more so as they mixed to a greater extent with Europeans. Railways, telegraphs and other inventions of the Frange, or European, had shown them that the "magic" of the West was more powerful. and probably more useful, than their own,



EWING GALLOWAY

SHARIA FUAD EL AWAL, A BUSY STREET OF DOWNTOWN CAIRO

Ciguerel department store is a gleaming white addition to tree-lined Sharia Fuad el Awal, one of many broad avenues in the modern quarter. The wide view of the intense blue sky chases away all the Oriental mystery that is so much a part of the older sections of Cairo where, in the shadow of magnificent mosques and palaces, tenements crowd narrow alleyways.



THE MOSQUE OF SULTAN HASAN—one of the finest in Egypt—stands on a shelving rock opposite the citedel it covers more than two acces, and its lottiest minaret, 567 feet high, is the tallest in Cairo. This mosque, built in 1357, so pleased the Sultan that he had the right

hand of the architect cut off so that he could not design another. Next to it is the chief Liwan, or sanctuary, which is built on the side towards the holy city of Mecca. It is a madrasah, or school mosque, and classes for teaching Moslem religion and law are held there.

With these improvements the city began to develop rapidly. A person acquainted with the old Cairo, before its face was altered by Western influences, would see a great many striking changes. But in spite of improvements, much of Cairo preserves the air of an Eastern city.

The Mingling of East and West

Now these are matters of a more or less historical character. It is good to know something about them before setting out to explore and enjoy the wonders of the city. But even if we know nothing about them we shall be able to appreciate Cairo.

Impressions will crowd in upon us at such a furious rate that we shall hardly know how to sort them out afterward. This mingling of East and West, this jostling of strange and varied types of people and costumes, this jumbling together of buildings which seem like those only seen in dreams, this throb, throb, throb of one of the greatest cities in the East, will prove to be a source of endless delight.

But we shall not see much of all this in the European quarters—the Taufikia, the Ismailia and the Kasr-el-Dubara quarters, occupying the northwestern portion of the city. Here are the hotels, banks, ministerial offices, consulates, clubs and fine palaces of wealthy Egyptians and Levantines as well as of Europeans.

Where Aïda Was First Produced

In the center of Taufikia is the Esbekia Garden, a beautiful part, with Opera Square on the south. In the Opera House, which is now shabby and brown colored, was first produced Aida to celebrate the opening of the Suez Canal, and the costumes are still used when that opera is given. The Khedive Ismail, who nearly bankrupted the government, paid Verdi \$50,000 to write an opera for the occasion, but that was not his only method of celebrating, nor the only expense he incurred in connection with the great event.

Sharia Kamel is Taufikia's principal thoroughfare, its Fifth Avenue. Near the northern end of it once stood the luxurious Shepheard's Hotel, often called the most famous hotel in the world. Built in 1801, it was sacked and burned in 1952 during a savage riot. Sharia Kamel, at its southern end, becomes Sharia Abdin, which leads to the Midan Abdin, one of the city's royal palaces.

To the northwest of the European quarter is Bulak, the old part of Cairo, which is still kept very busy loading and unloading the produce carried up and down the Nile in strange ships. Like the rest of Cairo, the scene is bright and full of life

Wonderful Palace on an Island

Bulak is easily reached by street car. and on the nights of popular festivals it is well worth seeing with its crowded streets, its gaiety and its curious customs. Just opposite is the Island of Bulak, commonly known as Gezira, where Ismail Pasha built a wonderful palace, such as those they used to build in the time of the Caliphs, and laid out a race course. The palace has now become a hotel, where the Khedival Sporting Club is always holding entertainments enjoyed both by Europeans and Egyptians. The island of Gezira is also the site of numerous foreign embassies and many of Cairo's wealthy citizens have villas there.

The fine Kasr-en-Nil Bridge, or Great Nile Bridge, connects the island with the east bank of the Nile. Most of the different types of people who live or work in the city can be seen by standing on this bridge between 6:30 and 9 A.M. when it is crowded with merchants, marketgardeners and peddlers, dressed in the oddest costumes, and bringing in their wares to the markets of the city. The brown water of the Nile flows beneath. dotted with the peculiar craft of Egypt. Tall-sailed painted boats, called feluccas, sway gently in the morning breeze and wait for the afternoon when the bridge is opened to allow such vessels to pass up or down the river.

Near the eastern end of the bridge is the Cairo Museum, which contains the most valuable collection of Egyptian antiquities in existence. The body of



GEZIRA, which means "island" in Arabic, is connected to Cairo by a bridge. On holidays, people cross from the mainland to stroll beneath the palm trees that shade the streets.

Tutankhamen and the priceless articles, pictured with the chapter on Ancient Egypt, are on display here. We may see also the mummies of Egypt's mightiest Pharaohs so well preserved that one may even tell the color of the hair. The museum was started through the efforts of Auguste Mariette, a French Egyptologist, and a statue of him occupies a place in front of the museum.

Then we come back to the main streets. What do we notice? A visitor from the West will probably feel quite at home with the kodak shops and pharmacies but will be impressed by the way Cairo seems to live in the streets. The innumerable cafés of the Esbekia place their chairs and tables on the pavements, so that it is frequently necessary for a passer-by to step into the road, and run the risk of being knocked down by an arabiyeh, or carriage, dashing through the street at the absurd rate these Eastern drivers love so much.

Backgammon for a Cup of Coffee

These cafés are interesting, since in them will be found people from almost every quarter of the earth. Here are groups of Italians, Greeks and Levantines arguing noisily or drowsily smoking the bubbling nargileh (water-pipe), or playing a kind of backgammon for the price of a cup of coffee.

As we continue through the streets, every step will reveal a new and fascinating picture. Odd little shops, protected from the sun's glare by torn flapping awnings, catch the eye. Not that the goods displayed for sale are always particularly attractive but the dark interior has an air of mystery and the promise, not often fulfilled, of strange merchandise. Now comes a door with a bead curtain jingling in the breeze-probably a barber's shop. A mass of color piled among the shadows of a hole in the wall proves to be a fruiterer's. Next to it is a native café with pitch-black Ethiopians and tall Nubians and a dozen other varieties of modern Egypt's many races.

The streets, of course, are choked with a motley crowd in which only the camel or a lonely Arab from the desert seems able to maintain any dignity. The drivers of vehicles and beasts of burden keep up an incessant shouting as they thread their way through the crowd. "Make room, O my mother!" calls a shrill-voiced donkey-boy. "O Sheik, take care!" "You, good fellow, to your right!" "By your favor, effendi!" and so on.

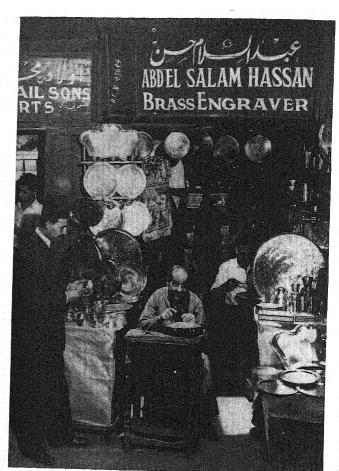
A Street of Saladin's Days

There is even more bustle in Cairo's bazaars than in the streets. From the Ismailia quarter, the way down to the bazaars is through the Muski, an extremely long thoroughfare running toward the east. A tradition says that the Muski dates from the time of the famous Saladin, who was the Crusaders' chivalrous foe.

Its character has changed a good deal in recent years, and many of the native shops with their quaintness and smells and sleepiness have been replaced by large shops built on the French pattern with plate-glass windows. At one time practically the whole of the street was roofed in, and on very hot days it proved a cool, if crowded, retreat. On festival days one sees representatives of many lands, from Sweden in the north to the White Nile in the south, and from India in the east to Morocco in the west.

Motley Carnival of Cairo

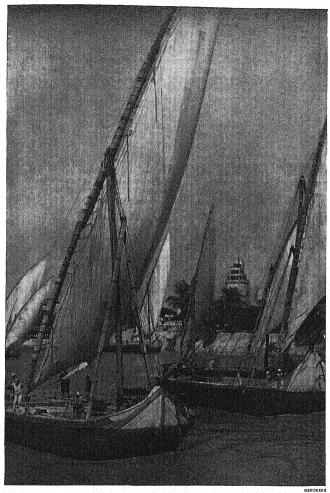
It is one of the most characteristic parts of Cairo-a carnival in which the costumes of Europe, Asia and Africa mingle in a fascinating collection. At first it is a little confusing. Here are Turks, grinning Negroes from the Sudan, boredlooking fellahs, or peasants, in their bright rags, wily Levantines, green-turbaned Sherifs, or Moslem holy men, dignified Beduins, and people whose race it is often difficult to guess. All day long the street is packed with donkeys, strings of camels, loaded wagons, water-carriers with their tinkling glasses, sherbet and sweetmeat sellers, carriages and richly caparisoned horses, porters shaped like sickles, from the burdens they carry, gorgeously dressed women, beggar chil-



TRANS WORLD AIRLINES

TRAYS, PLATTERS, GONGS, VASES—ALL IN GLEAMING BRASS

The shining array of wares could hardly fail to catch the eye of a passer-by, which is what it is meant to do. One of the delights of the visitor to Cairo is to stroll through its bazaars, where all the shops are open to the sidewalk. Many of the articles are only inexpensive souvenirs, but one may also find useful objects and genuine works of art.



LATEEN-RIGGED FELUCCAS with sharply upthrust bows have been the cargo boats of the Nile for many centuries. Here they sail past some modern buildings of ancient Cairo.

dren, closely veiled women and all the odds and ends of Cairo's astonishing medley. The ring of hammers is almost deafening in the bazaar of the Brass Workers; and a strong smell of perfume comes from the Scent-sellers' bazaar. In the Spice Market men pound strange roots and herbs in metal mortars. Beautiful rugs with intricate patterns, from Damascus, Ispahan and Samarkand, can be seen in the carpet shops.

The buildings of Cairo are as interesting as the people, and as full of color.

In the old Fatimate city is the great mosque-university of El Azhar, which was built by Gohar in 973. It is considered to be the most important Mohammedan university in the world.

The Voice from the Minaret

Every visitor to Cairo will remember the blue tiles of the Ibrahim Agha Mosque, the wonderful doorway of the Sultan Hasan Mosque, and the delicate ornamentation and graceful minaret of Kait Bey. In the Arab Museum there are a valuable collection of Arabian art and a fine library, which have helped to make Cairo the premier city of Arab learning.

We shall now go up to the Citadel on the Mokattam hills and look out upon the wonderful panorama of Cairo which is spread before us. We see below us a forest of minarets, rising gracefully from the flat-roofed, yellowish buildings in which the streets are like pathways of darkness. From these slender minarets, rising from Cairo's 250 mosques, goes out the call to prayer, not by the ringing of bells but by the human voice.

The Citadel, built, so some believe, from stones taken from the Pyramids, was once the key to fortified Cairo but now it is worthless as a military stronghold. Its greatest feature, apart from the view it offers, is the Mehemet Ali Mosque, with its two wonderfully slim and beau-

tiful minarets

The most direct road to the Citadel used to be through the Gate al-'Azah, and then along a narrow track walled on each side. It was in this narrow way that the massacre of the Mamelukes took place on

March I, 1811. The Mamelukes, descendants of slaves, had become a ruling class. Before the massacre all the Mamelukes of any position or power were decoyed into the Citadel on the pretense that they were to assist in celebrating the appointment of Tusun, son of Mehemet Ali, to the command of the army.

How the Mamelukes Were Betrayed

Having taken coffee, they formed in a procession and marched down the narrow way with a body of the Turkish Pasha's troops in front and behind. As soon as they arrived at the exit gate, it was suddenly closed upon them. The Pasha's men at various vantage points then opened fire, and those Mamelukes who tried to escape were cut down by the sword.

It is said that of the 470 Mamelukes who entered the Citadel, only one came out alive, having made his horse leap through an opening in the wall to the most below. The horse was killed by the

fall, but the man escaped.

Revered Mosque of 'Amr Ibn al-'Asi

The first mosque to be built in Fustat was that raised by 'Amr Ibn al-'Asi, who conquered Egypt in A.D. 639. The present mosque of 'Amr stands on the same site, but has very little of the original building in it. It is not very attractive but the people hold it in special veneration. It is said that, after a long, disastrous drought (1825–28), Moslems, Christians and Jews went there together to pray for rain. On the next day it rained.

All through this glittering city you will find strange monuments of the people—mosques in plenty; old Arabic gates; an endless medley of bazaars, all hung with the brightly colored merchandise of Eastern lands; ancient churches founded by the Copts, which was the name given to the earliest native Christians; mysterious lattice windows—all the fascination asso-

ciated with the Orient.

And just a stone's throw away, on the threshold of the Libyan Desert, the Sphinx looks out to the dim minarets of the city, and the Pyramids rise like golden stairways to the blue of the sky.

THE SUDAN

Country of the Blue and White Niles

Broadly speaking, the Sudan is a vaguely defined region in north-central Africa, which extends all the way across the continent. It is a vast transition zone between the Sahara Desert and the equatorial rain forests. The "nation" called the Sudan, however, is the part of the belt that is south of Egypt-what was once called the Anglo-Egyptian Sudan. (Egypt-what was once called the Anglo-Egyptian Sudan. (Egypt-and Britain shared in its government.) After centuries of outside rule, this land of sun-scorched plain, broad grassland and marsh has at last emerged as an independent state with self-government; and it is the state that we speak of in this article.

OOKING at the Sudan as it appears on the map, its most striking physical feature is the Nile River and its numerous branches. Chief of these are the White Nile, which begins far south in Lake Victoria (in Uganda), and the Blue Nile, which flows down from the highlands of Ethiopia. Their waters mingle at Khartoum, in the north-central part of the Sudan. From here the main Nile continues northward, its course describing a huge S between Khartoum and the Egyptian border.

The famous six cataracts of the Nile are all north of Khartoum and all but one are within Sudanese territory. In making the great S sweep, the river flows through a narrow valley, dropping 935 feet in the series of cataracts. They do not have the appearance of the usual waterfall but, rather, are foaming rapids. Instead of being named, they are numbered, from north to south. The First Cataract is at Aswan, in Egypt, where there is a huge dam and locks. The Second Cataract is just south of the Egyptian-Sudan border, near Wadi Halfa. The Third is below Kerma; and the Fourth, above Kareima. This stretch is the only section between the cataracts that is navigable. The Fifth Cataract is below Berber; and the Sixth (or Sabaluka Cataract) is above Wad Hamid (about fifty miles north of Khartoum).

The greater part of the Nile flows through the Sudan, and this is a major reason for Egypt's concern and interest in its neighbor. Without the storied river, both Egypt and the northern Sudan would be completely desert.

Most of the Sudan is a plain, built up through the ages by deposits from the Nile's overflow. There are only a few heights: the rather low Nuba Mountains in the center; the Ethiopian highlands on the southeast; the Ethai range along the Red Sea coast; the Marra Mountains in the west, along the Nile-Chad watershed; and the Imatong Mountains on the south. at the edge of the East African highlands.

In the north, where the Libyan and Nubian deserts (parts of the Sahara) flank the Nile Valley, there is little rainfall. Here the natural cover of vegetation is scrub, grass that grows no higher than twelve inches, and desert plants that can exist with little moisture. Toward



the south, however, the amount of rain increases. Savanna—grassland with scattered trees—appears. Along the course of the White Nile is a region of marshes, called the Sudd. It is about 250 miles long and 200 miles wide. Floating vegetation (sudd)—mostly papyrus and water grasses—clogs the river and its tributary streams. A great deal of the Nile water is lost in these swamps; and some day a canal probably will be built to bypass the Sudd. On the extreme south, near the border with Uganda, there are patches of dense, wet jungle.

One of the oddest facts about the Sudan is that it is likely to be hotter in the north than in the south, which is not so very far from the equator. In Wadi Halfa, just below the Egyptian boundary, a temperature of 126 degrees in the shade is not un-

usual. Yet in the far south, nights may be so chilly that a heavy overcoat is comfortable.

The Sudan is mostly a land of wandering herdsmen. Where farming is carried on, methods are still fairly primitive. The big exception to this is in certain sections of the Nile Valley, which specialize in long-staple cotton. The fiber is the Sudan's chief contribution to world trade. The heart of cotton production is the Gezira, a region just south of Khartoum between the Blue and White Niles. It is some 80 miles wide and 150 miles long. Fertile as the soil is, it must be irrigated. Water is fed to the Gezira from the Sennar Dam. on the Blue Nile. The structure was built between 1922 and 1925. and is 3,300 yards long and 110 feet high. When the reservoir is full-during the

SUDANESE WOODCHOPPERS on the banks of the Blue Nile at Khartoum. In the background are some of the lateen-rigged sailing craft that handle much of Khartoum's commerce.



flood period of July to December—it extends 93 miles upstream. To protect the Nile flow in Egypt, there have been various agreements limiting the irrigated area in the Gezira. As a further safeguard for Egypt's requirements, another dam was constructed on the White Nile at Jebel Aulia (25 miles south of Khartoum). This is where, during flood season, the high waters of the Blue Nile make a pond of the comparatively low waters of the White Nile.

In the Gezira district, especially, land ownership and the profits of farming are, thus far, more widely spread than in Egypt. Besides this, cotton crops are rotated with durra (great millet) and hyacinth beans (which are both a food and a forage crop). In small areas, peanuts and

vegetables are cultivated.

The Sudan contributes another product of international importance. This is gum arabic. It is gathered from wild acacias, mostly in the semiarid Kordofan Province of the central Sudan. Gum arabic is used in making inks, adhesives and confections, and as a fabric filler and an emollient. El Obeid, a fairly large city 230 miles southwest of Khartoum, is the center of the gum-arabic trade and of trade in oilseeds. It has an airport, is the junction of a number of roads and caravan routes, and a railroad connects it with Khartoum.

Khartoum, Hub of the Sudan

Khartoum itself is the capital of the Sudan. It is on the left bank of the Blue Nile, just above where that stream joins the White Nile, With Khartoum North (on the right bank of the Blue Nile) and Omdurman (a few miles north), Khartoum forms the lively center of all Sudanese activity-in government, business, education. A 2,130 foot rail and road bridge across the Blue Nile connects it with Khartoum North; and a 2,012-foot tramway across the White Nile leads to Omdurman. By river and by railroad, Khartoum draws to it the commerce from Wadi Halfa, Port Sudan (on the Red Sea) and El Obeid.

Khartoum was founded in the 1820's by a Moslem leader, Mohammed Ali, and



CITIZENS wait their turn for an audience with the town clerk in a Sudan village.

grew fast as a trade center. In the early years it sent slaves and goods to Egypt. However, in 1885, during a struggle between British forces and the Mahdists, a fanatic Mohammedan group, Khartoum was captured and destroyed. Lord Kitchener reoccupied the city in 1898, and it was rebuilt on a modern town plan. Today it is the home of the Gordon Memorial College and the Kitchener School of Medicine.

A number of different peoples inhabit the Sudan, speaking different languages and having a variety of customs. The big dividing line, however, is about where the swamps of the Sudd begin. North of this line the people are largely Moslem Arabs. South of it, they are chiefly Negroid, separated into a number of tribes—Dinka, Nuer, Shilluk. If the Sudan is to be a stable country, the two groups must find a common meeting ground—not an easy achievement where the general level of education is still very low.

In any case, the Sudan has had a checkered history. In the days of ancient Egypt, it came under the Pharaohs. The



BRITISH INFORMATION SERVICES

A NUBA of the central Sudan inspects a rare bird that has landed at a remote airfield.

northern part was included in the old country of Nubia. Under the Romans, Nubia (the country of the blacks) was settled by Negro tribes. They mixed with the Hamites already there and formed a powerful kingdom. It was converted to Christianity (the Coptic faith) in the sixth century. In the fourteenth century, Mohammedanism became predominant, and the old kingdom of Nubia broke up into a number of petty states. Thus it remained until the late 1800's, when the whole territory became a condominium—the Anglo-Egyptian Sudan.

As elsewhere in many parts of the globe after World War II, the Sudanese awoke to a strong urge for independence and their own government. No outsider could tell just how many of the people were really prepared for the responsibilities that go hand in hand with sovereignty. Nevertheless, it was a drive that the Western world, with its ideal of freedom, could not ignore. The result—the Sudan became a completely independent and sovereign nation in December 1955.

THE SUDAN: FACTS AND FIGURES

THE COUNTRY

Formerly called the Anglo-Egyptian Sudan. Bounded on the north by Egypt; on the east by the Red Sea, Eritrea and Ethiopia; on the south by Kenya and Uganda; on the west by the Belgian Congo, French Equatorial Africand Libya. The Sudan is divided into 9 provinces. Area: about 967,500 sq. mi.; population, about 8,764,000.

GOVERNMENT

As the Anglo-Egyptian Sudan, the territory was governed as a condominium, under a governor general appointed by Egypt with the assent of Britain. The first all-Sudanese government was inaugurated in January 1954. Under the constitution, there is a Parliament of 2 houses, and a prime minister. A head of state was to be elected in 1956; until then a five-man commission carries out executive duties.

COMMERCE AND INDUSTRIES

World's chief source of gum arabic. Other important products are cotton, cottonseed, hides and skins, vegetable ivory, groundnuts (peanuts), salt, gold. The chief grain crops are durra (great millet) and dukhn (bulrush millet). There are large numbers of livestock. Forests contain valuable woods, especially mahogany and vuba.

COMMUNICATIONS

Considerable shipping on Nile and its branches. About 2,070 mi. of railways. A motor transport service makes connections between some of the railroads and river steamers. There are a number of airports, and Sudan Airways makes scheduled flights.

RELIGION AND EDUCATION

In the 6 northern provinces, most of the people are Moslems, though there are several small Christian communities. Among the tribes of the south, originally pagan, there are a number of Christian missions. Up to the level of high school, education is largely in the hands of the government, particularly in the north. Altogether there are more than 1,000 government schools, with some 115,000 pupils. In the south there are more than 500 mission schools. Higher education is represented by the University College of Kharttoum, which consists of the Gordon Memorial College and the Kitchener School of Medicine.

CHIEF TOWNS, WITH POPULATIONS

Khartoum, capital, 82,700; Omdurman, 130,-400; El Obeid, 70,100: Port Sudan, 60,600; Wad Medani, 57,300; Khartoum North, 44,200; Atbara, 36,100.

ETHIOPIA AND LIBERIA

Two Independent Countries

Ethiopia, near the eastern coast of Africa, and Liberia, on the west coast, are two of the few independent countries on the continent. Ethiopia guarded its freedom jealously from the days of Homer until the Italians overran the country in 1936. When Britain drove the Italians out in 1941, Ethiopia regained its independence and in 1952 it joined in a federation with Eritrea, the former Italian colony on the Red Sea. Liberia began its life as a colony for freed American Negro slaves in the early nineteenth century. It became a republic in 1847 with a constitution much like that of the United States. A land of lush forests, rich mineral deposits and palm and rubber plantations, Liberia faces a future of great promise as its wealth of resources is developed.

HE kingdom of Ethiopia existed (with some changes of boundary) as far back as 1000 B. C., but little is really known about the country until comparatively modern times, though there are references to its wealth and power in many ancient writings. The tradition has been cherished that the rulers have descended from Solomon and the beautiful Queen of Sheba, who journeyed from her throne in Ethiopia to Jerusalem. fabled Ophir of Solomon, the city of sparkling gold, was possibly in Ethiopia, and the rich country reigned over by Prester John, the fabulous adventurer of medieval times, has been identified by a few writers as Ethiopia. But "the glory has departed," long since.

Ethiopia, a land larger than France, owes its long integrity in large part to its situation upon a mountain stronghold. In 1896 it was recognized by the European Powers as the Kingdom of Abyssinia, after defeating an Italian army at Adowa. Forty years later the Italians, after an arduous campaign of several months' duration, conquered the country and annexed it as part of the Roman Empire. After the second World War broke out, the British successfully overcame the Italian armies in eastern Africa, and Haile Selassie, the emperor who had been in exile during Italian occupation, returned to the throne.

It is a land of potential wealth. Inland from the coast there is a stretch of mostly barren lowland, sometimes falling to below sea level. The climate here is inclement to white men. A good part of the country, however, is occupied by moun-

tain ranges and fertile plateaus and valleys, where white men, once they become accustomed to the altitude, can live.

The mountain forests contain great drooping cedars and stately yews, as well as unusual specimens like the kosso (Hagenia), with pink flowers which hang like gigantic bunches of grapes. Everything is gigantic, even to the heather and the mountain thistle. Coffee is of particularly good quality, rubber, tobacco, bananas, rice, grapes and wheat are grown and flax may one day be an important item of export. To the south and west there is bamboo, which enables people to build better huts than the grass hives of the grazing regions, as well as bridges for the smaller streams. The larger rivers have to be forded or swum. Wild life includes leopards, monkeys and mountain hyenas. The birds are colorful, especially the flocks of little pink bee-eaters.

Near the centre of Ethiopia the Blue Nile (the Abbai) takes its rise, at Lake Tana. The river canyon has walls five thousand feet deep at one place.

The population is exceedingly varied, some seventy racial stocks being distinguished. These may be grouped in three major divisions: the original Hamitic peoples, the Semitic element and the Negro tribes. There is considerable intermarriage and the skin color varies from light chocolate to deepest black; nevertheless most Ethiopians fiercely resent being called colored.

Christianity probably reached Ethiopia in the fourth century. The form still practised is the same as the Coptic church

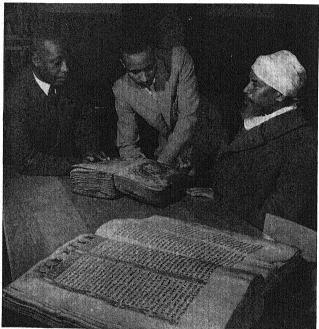
ETHIOPIA AND LIBERIA

of Alexandria. There are, however, many pagan tribes and a considerable number of Mohammedans, who scornfully called the Christians habeshi (mixed). From this the name Abyssinia arose. The people, however, have clung to the older name of Ethiopia for their country.

There are no large cities in our sense of the term. Addis Ababa, the capital, is but a rambling village, though it has 150,000 population. It has an elevation

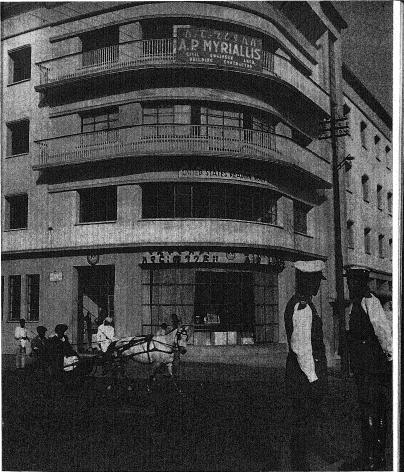
of over 8,000 feet and its cool nights make it very tolerable to white men. Down the roads come swaying camel caravans from the interior of Africa, jostled by automobiles. Cattle, sheep, dogs and chickens also make free of the main highways by day; at night the howling of hyenas shatters the silence.

As for Liberia, in 1822 a shipload of Christian Negroes embarked for the west coast of Africa and on arrival made a



RARE OLD MANUSCRIPTS FOR ETHIOPIA'S IMPERIAL LIBRARY

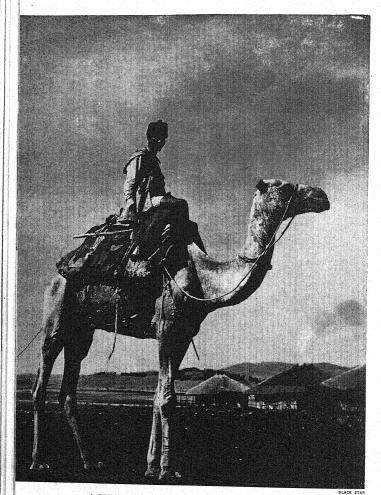
Librarians at the Imperial Library pore over old manuscripts that were found in the hinterlands of Ethiopia. Little remains of the literature of ancient Ethiopia before the time of Constantine the Great, but several hundred works written since his time are known to scholars. The manuscripts displayed above are probably about eight hundred years old.



BLACK STAR

MODERN OFFICE BUILDING IN ADDIS ABABA

The United States Reading Room in Addis Ababa, capital of Ethiopia, is in this pleasant, modern office building. Signs are in Amharic and English. The neat little pony drawing the rubber-wheeled trap is of the Ethiopian breed, peculiar to the country. These good-looking, intelligent horses resemble polo ponies in some respects, and they are good jumpers.



A PRECARIOUS PERCH HIGH ON THE HUMP OF A CAMEL

Camels have a lurching gait, and it requires considerable agility for a rider to keep his seat. The one-humped, or Arabian, camel is a fairly common sight in the interior of Ethiopia.

bargain with some local chieftains for a The newcomers were strip of coast. freed slaves from America who had been helped to immigrate to the African coast by the American Colonization Society which had acquired the location for the purpose. The first group settled in Providence Island at the mouth of the Mesurado River, and it was followed by many more, aided by the same and other philanthropic organizations. From 1822 to 1867 nearly six thousand free Negroes were transported to the section known as Liberia. The name was coined from the Latin word liber, meaning "free."

A Land of the Free

In 1847 the colonizing effort became the Free and Independent Republic of Liberia. Twenty years later it annexed additional territory, the tiny Republic of Maryland. Liberia's capital, Monrovia, was so named for President James Monroe of the United States. The United States has always had a great deal of influence in Liberia, and United States currency circulates freely. English is the official language.

Liberia's form of government is very similar to that of the United States. Its constitution provides for a president, a cabinet and a two-chambered legislature. Both men and women have the right to

The flag is red, white and blue—red and white horizontal stripes and a blue field in the upper left-hand corner bearing a white star.

A Tropical Climate

Liberia's 350 miles of shore extends along the South Atlantic Ocean from the Ivory Coast to Sierra Leone, and the small country runs at the most about 200 miles inland. The climate is tropical, with frequent and heavy rainfall and persistently high temperatures.

It is a land of dense forests where no cold season ever checks the heavy undergrowth. Roads along the coast degenerate into jungle tracks as they approach the heavy bush. There are also grassy tablelands and hills in the interior.

Of its thirty-odd rivers, only a few are really navigable, and even they can accommodate only shallow-water craft. The St. Paul furnishes about twenty miles of waterway and the Kavalli eighty miles. The seaports, in addition to the capital, are Marshall, Robertsport, Buchanan, Greenville and Sasstown.

Influence of the Colonists

The Liberians—that is, the Negroes of American descent—are estimated to number as many as twenty thousand, but they form only a small part of the total population. They live chiefly along the coast, for when they first settled there it was unsafe for them to go inland without an escort. Many of the inland tribes hated them as interlopers.

However, their higher living standards and their schools have reached many thousands of their neighbors since the first colony was founded. The Liberian Government provides elementary, high and technical schools, and Christian missions maintain many more. Liberia has two universities.

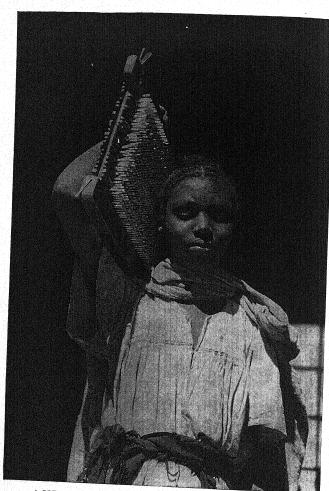
The Earliest Residents

The first colonists found a wide variety of Negro tribes living in the area, each with its own distinct culture pattern, many of the men and women of strong, handsome appearance. Among these were the pagan Kru tribes, the Mandingos, who are Mohammedan, and the Kpwesi; and there are many others.

The Krus live on the coast and are seafaring folk. For centuries they have hired themselves out as sailors on European ships.

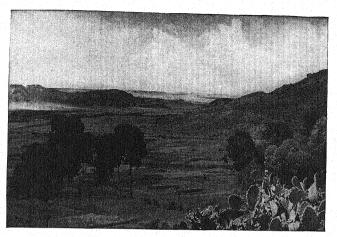
The Mandingos live on the inland grassy plateau where they raise cattle and crops. They have Arab blood in their veins and they dress picturesquely in flowing white robes and flat slippers. They are successful missionaries of their Moslem faith, and in this work they have done a good deal with those Liberian tribes in the remote depths of the jungle who were once camibalistic.

Most of the other tribes live in the dense interior with lower cultural levels.



A PRETTY YOUNG WORKER IN A MATCH FACTORY IN ASMARA

The matches are held tight and separated in a framework so that the tips will not ignite accidentally. Asmara is the capital and chief town of Eritrea, which is joined to Ethiopia.



A PORTION OF THE VAST INLAND PLATEAU REGION OF ERITREA

The coastal area of Eritrea is hot and humid. The broad, inland plateau regions, however, have a temperate climate at 6,000 feet and are quite cold at their highest altitude of 9,000 feet.



PHOTOS, BLACK STAR

MODERN TRANSPORTATION METHODS FIND THEIR WAY TO ERITREA

Busses are still a novelty in some parts of Eritrea, as the roadside audience would seem to indicate, but they are rapidly becoming the accepted means of transportation even in the hinterlands.



NURSERY FOR OIL PALMS NEAR MONROVIA

Oil palms grow well in the rich soil of Liberia, and palm oil finds a good market abroad. It is used for lubrication and in cosmetics and soap; and in some parts of the world in cooking. In this nursery young plants are grown from selected seed (the parent plants pollinated by hand). Each year several thousand baby palms are distributed to planters from the nursery.



A LESSON IN THE CABBAGE PATCH

PHOTOS, U. S. STATE DEPT.

A teacher from a United States economic mission shows the proper method of setting out cabbage plants to students who are being trained to serve with the Liberian Department of Agriculture's Extension Division. They will teach farmers better ways to work the land, explaining up-to-date, scientific methods such as diversification of crops to preserve fertility of the soil.

ETHIOPIA AND LIBERIA

The most powerful tribe of Liberia is the Kpwesi. They are hunters and warriors and, contrary to the usual native mode of waging war, they disdain ambuscades, but charge straight at their foe in mass formation. They use bows and arrows for hunting, but fight only with long knives. They are a musical race and, besides beating the inevitable tom-tom, play such instruments as the harp and the flute. They are also expert in various crafts.

The hostility that the inland tribes used to show toward the descendants of the

A NATIVE BEATING RICE AT HOME In their everyday life, the villagers in Liberia still use the same tools their ancestors did.





HOTOS, BLACK STAR

WELCOME FROM A CHIEFTAIN

An officer of the Government comes to check on the needs of a little village inland.

freed slaves has diminished in recent years. Better feeling has come about from the attempts of the Government, traditionally controlled by the coastal inhabitants, not only to consider the interests of inland tribes but also to give positions in the Government to people from the interior.

Monrovia, the capital of Liberia, is built on the shores of a lagoon. Signs of contact with the West may be seen in the markets where swing records and comic books are sold beside food and clothing. Cars and trucks rattle over the dozen or so streets in Monrovia, fighting their way through groups of native carts and herds of cattle. The clothing varies from robes and ragged shorts to cotton dresses and cord suits. The city has no water or sewage systems and no telephones. It is the site of the University of Liberia, one of two colleges in the country. Although there is no censorship of the press, as there is in some of the colonies near Liberia, the Government controls the largest newspaper. There are many slums, but the capital also boasts some luxurious homes. Designed for the tropics, the houses usually have balconies and piazzas similar to those attached to houses in the southern states of America, and the gardens are gay with scarlet hibiscus blooms. Monrovia is the seat of the Liberian government. It is divided into five long streets which rise one above the other parallel to the waterfront.

On one side of Monrovia is a large colony of Krus, living in palm-thatched huts. There the Krus, or Krooboys, as they are called, stay during the short in-

tervals between their voyages.

A rich American rubber company some few years ago acquired a huge tract of land in Liberia and has planted millions of rubber trees. Such an undertaking cannot but have a good effect on the financial condition of the country, and Liberia, already modeled politically on the United States of America, should derive further benefit from acquaintance with the enterprise of modern commerce. The above mentioned rubber company was not involved in the alleged

forced labor conditions which an international commission was asked to investigate.

Except for rubber, which is increasing in importance, the development of the other products of Liberia's rich and productive soil has scarcely begun. There are vast tropical forests almost untouched and the same may be said of the mineral resources of which gold, copper, tin, zinc and iron are known to exist. The principal exports are coffee, cacao, palm oil, palm nuts and piassava fibre. There are no important manufacturing industries; however, a fishery has recently been established with facilities for canning.

Liberia's strategic location in Africa made it a valuable Ally in World War II. Air bases and harbors along its 350-mile coastline, facing the Brazilian bulge of South America across the narrowest stretch of the Atlantic assured a speedy flow of supplies during and after the war.

ETHIOPIA AND LIBERIA: FACTS AND FIGURES

TIRRRIA

A Negro republic in West Africa, bounded on north by French Guinea, on the east by Ivory Coast, on the south by the Atlantic Ocean and on the west by Sierra Leone. Executive power is vested in a president and Cabinet; legislative power in a Senate and House of Representatives. Area, about 43,000 square miles; total population estimated at more than 1,500,000. Agricultural, mining and industrial development slight. Chief exports are rubber, palm kernels, palm oil and raw gold. Leading imports are textiles, foods and beverages, petroleum and coal, machinery and motor vehicles. Means of communication are poorly developed. Americo-Liberians are mostly Protestants. Government educational system supplemented by mission schools. Capitalis Monrovia, population, about 10,000.

FORMER ITALIAN COLONIES

Ethiopia regained its independence in 1941. Following World War II Somaliland became a UN trust territory under Italian administration. Eritrea, bordering on northeastern Ethiopia.

joined with her in an East African Federation on August 11, 1952. Eritrea handles its own domestic affairs, while Ethiopia controls foreign. Eritrea, area, 45,000 sg. mi.: population.

Eritrea, area, 45,000 sq. mi.; population, 1,104,000. Leading industries are stock-raising

and salt production. Population of chief towns: Asmara (capital), 117,000; Massawa, 80,000.

ETHIOPIA (ABYSSINIA)

Country in northeastern Africa. Area, 350,000 square miles; population, about 10,000,000. Chief industries are agricultural and pastoral. Forests contain valuable trees. Iron, gold, platinum, coal, copper, sulfur and potash are found. Chief exports are hides and skins, coffee, wax, grain, civet and native butter; imports are salt, cotton yarns and fabrics, building materials and petroleum. Length of motor roads, 11,120 miles; of railways, 424 miles. The Coptic (Christian) Church predominates; there are also Moslems and Jews. In schools throughout the country there are 60,000 pupils. Population of chief towns: Addis Ababa (capital), 340,000; Dire Dawa, 30,000; Harrar, 25,000.

ITALIAN SOMALILAND

Bounded by Gulf of Aden, Indian Ocean, Kenya, Ethiopia and British Somaliland; area, 198,420 square miles, and population, 1,246,000. Chief industries are cattle-raising and farming; leading exports are skins, livestock and bananas. Roads, 425 miles; railways, 60 miles. Population of capital, Mogadiscio, 70,000.

BRITISH AFRICA

From Mangrove Swamps to Mountain Glaciers

Scattered along Africa's hot Atlantic coast north of the equator are Gambia. Sierra Leone, the Gold Coast and Nigeria, each separated from the others by non-British territory. In contrast, the territories in British east and central Africa, from Kenya to Southern Rhodesia, are a continuous land mass, much of it highland. (The Union of South Africa is discussed in another chapter.) To all these lands exciting developments in industry and in government have come, especially since World War II. The most hopeful note for the future is that Africans themselves are sharing in this progress.

THE lands that make up British Africa, exclusive of the Union of South Africa, have one feature in common: all are within the tropical zone. Otherwise they have great variety. One may find coastal mangrove swamps, arid sunbaked grasslands, papyrus marshes, volcanic deserts, thornbush savanna, rain forests, endless plains, great cliffs, magnificent rift valleys and eternally snow-capped peaks.

There are just as many differences among the people. They may be hunters or wandering herdsmen, who refuse to sell their cattle, settled farmers or even miners. Tribal systems run the gamut from autocracies to democracies. In religion, the people may be Moslems, Christians or pagans. Nearly four hundred different languages are spoken. And besides the Africans, there are settled populations of Europeans and Asiatics in the eastern and central areas.

With the exception of a few places on the coast, the British made contact with the Africans only in fairly recent times. Most of the territory was acquired late in the 1800's, and set up as colonies or protectorates. Little was done to develop most of these lands until after the first World War. Since the second great conflict, activity of all kinds has speeded up enormously. In the political sphere, for instance, the Gold Coast, Nigeria and the Central African Federation have all practically achieved self-government.

British Africa shares, of course, in the basic problems of the whole continent. Some areas get too much rainfall and others too little; and there are vast tracts where the fertile soil has been worn away. Improved transportation is a necessity—more free and safe harbors, open rivers, cleared roads, modern railroads. Africans still suffer severely from diseases that are either unknown or have disappeared elsewhere. Yet in spite of the political friction that has flared up in some sections, these problems are slowly but surely being solved.

What is called British West Africa consists chiefly of Gambia. Sierra Leone, the Gold Coast and Nigeria. They are all on the great bulge of the continent into the Atlantic. Here the coast is "beaten night and day by huge Atlantic rollers which, even from five thousand feet up in the air, can be seen like an everlasting fringe of waving lace to the bright ochre beaches." Gambia is little more than a river valley, and Nigeria is the largest territory of British Africa. For purposes of government, Nigeria includes its eastern neighbor, the British Cameroons, which is a United Nations trusteeship. A similar arrangement links the Gold Coast and its neighbor on the east, British Togoland, also a UN trusteeship. British West Africa has some of the most densely populated districts on the continent. White settlement is excluded.

Nigeria, Delta and Upland

The coast of Nigeria is fringed with swamp, where dense thickets of mangroves choke the water. It is here that the Niger River, nearing the sea, fans out into a broad delta, its waters separating into

BRITISH AFRICA



considerable strength to lift the heavy logs.

TIMBER cleared from the mangrove swamps of Sierra Leone is used as fuelwood. It takes

hundreds of rivers, creeks and lagoons. Actually the delta occupies much of the low-lying plains of the coast. From these alluvial plains the land rises gradually to the low plateau of western Africa. It is fairly flat, though many little granite hills rise above the general level, the Jos Plateau to 6,000 feet. Along the eastern border, the uplands reach their highest point in Mount Cameroon, a huge volcanic peak towering 13,350 feet above sea level. As the land slopes up, it passes first through a broad belt of thick rain forest. Beyond lies the savanna, which covers about two-thirds of the country. Open woodland, with poor grass, alternates with parkland, where trees are widely scattered. On the northern boundary, thorn scrub takes over.

Most of West Africa is hot, and the south of Nigeria is both hot and wet the year round. Rainfall gradually lessens with distance from the sea, however, and northern Nigeria is very nearly desert.

In the mangrove swamps, almost impenetrable, only a few fishermen live, their



FOUNDED IN 1788 as a home for freed slaves, Freetown, the capital of Sierra Leone, has the best natural harbor of Africa's west coast. It is also a naval coaling station.

huts perched insecurely on low mud banks. Nevertheless, the country's major ports, Lagos and Port Harcourt, are located in this zone. There are railroads from these cities northward to Kano and other towns.

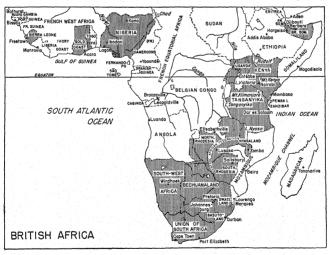
The hardwoods of the rain forest supply a thriving lumbering industry. Where the timber has been partly cleared, the oil palm flourishes. Palm oil is Nigeria's most valuable export. The most productive area is in the densely settled east, the home of the Ibo tribe. The Ibo are intelligent and alert and are making great strides in education.

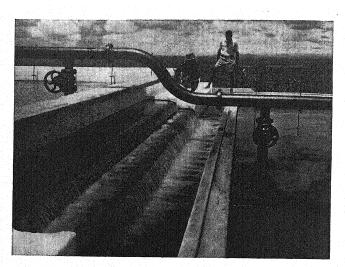
In southwest Nigeria live the Yoruba, who have long been among the most progressive of African tribes. In contrast with the Ibo, they already had a highly developed tribal organization when the Europeans arrived. The Yoruba are town dwellers by preference. Many live in Ibadan, which has a fine university. The Yoruba who are farmers, however, produce most of the cocoa grown in Nigeria. Because of the poor, leached soils, they

and other farming tribes are forced to practice a shifting agriculture. When one plot is exhausted, in two to five years, they must clear another in the forest and permit the old one to recuperate, which may take twenty years.

The savanna of the north provides good grazing for cattle and goats. Where this . land is farmed, the chief crops are millet, sorghum, peanuts and cotton. northern Nigerians are Moslems; and the Hausa form the largest of the Moslem tribes. The Hausa grow most of the peanuts that are shipped abroad in large quantities. These people are also noted craftsmen, especially in metal and leather, and traders. Kano, which has a Moorish air, is the Hausa city. Built on the site of an older town, the present Kano dates from the 1500's. It is surrounded by a high, thick wall and has one of the liveliest and most picturesque markets in Africa.

The second largest Moslem tribe is the Fulani. Originally the Fulani were all wandering herdsmen. Today, however, only the "cow" or bush Fulani proudly

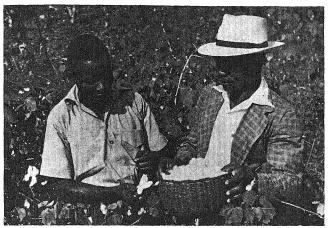




WEIJA WATERWORKS are a boon to the Gold Coast seaport of Accra. The city is hardly more than five degrees north of the equator, and irrigation is necessary during the dry season.



SUN-DRYING COCOA BEANS, near Tafe on the Gold Coast. The workmen move the beans around on trays to speed the drying. The bean pods are green, but turn brown in the sun.



BRITISH INFORMATION SERVICES

NIGERIAN COTTON has a short fiber but otherwise is excellent. Nigeria's textile industry is expanding, and many factory owners are growing their own cotton on the spot.

carry on the old nomadic life. They will neither eat meat nor willingly part with any of their cattle. The animals are kept for their milk and hides. "Settled" Fulani combine their interest in cattle with farming. Their circular mud huts with thatched roofs are more sturdily built than the temporary homes of the bush Fulani. "Town" Fulani are descendants of the Fulani who conquered the Hausa in 1804. They have largely adopted Hausa customs, dress and language.

Strewn over the Jos Plateau stand the simple villages of hill tribes, with tilled fields here and there. The hill people are small of stature, and wear a few leaves or nothing at all.

Nigeria has a few minerals: coal at Enugu, tin and columbite at Jos. The last is a complex ore, used in aircraft construction. An extremely precious ore, of uranium, has been found near Kano.

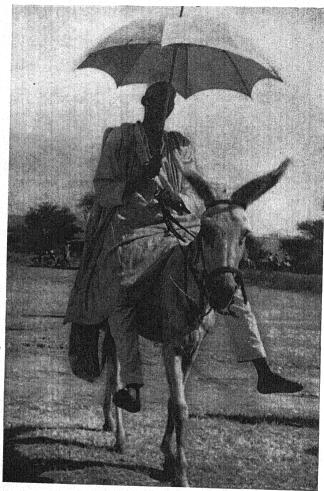
The Gold Coast

Like Nigeria, the land of the Gold Coast slopes upward, with a coastal lowland, a forest belt and open parkland in the north. Rainfall and plant life also follow very much the same pattern. Practically the whole Gold Coast is drained by the Volta River.

The lowlands are rather drier than is usual along the Gulf of Guinea. Accra, the capital, lies here. It is a "surf port." Vessels anchor in the open sea several miles offshore, and cargo is lightered on long boats propelled by twelve paddlers. It is an exciting spectacle to see these boats negotiate the heavy breakers.

Twenty miles east of Accra, a new port, Tema, eventually will replace the slow and dangerous surf-loading at Accra.

The political divisions of the Gold Coast follow the natural separations of the land into coast, forest and parkland: the Gold Coast proper, the Ashanti "kingdom" in the center and the Northern Territories. Ashanti is the Land of the Golden Stool. There is a real stool, which outsiders think is probably only gold-plated. In any case, it is the throne of the Ashanti king, or chief, who may be "enstooled" or "destooled," as a European king is enthroned or dethroned. The stool is also a sacred



DRIVE-IT-YOURSELF in northern Nigeria. A donkey wearing an easy-chair type of saddle can be hired from the park "taxi" stand in Kano, a market town serving a large district.



AFRICAN WORKERS descend into an excavation in northern Nigeria to refill their head pans with columbite, a mineral needed to make special steels for building aircraft.

object, as it is considered the soul of the Ashanti people.

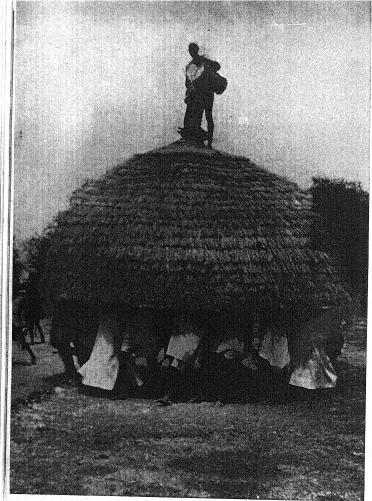
The greatest wealth of the whole Gold Coast lies in the hilly, forest area of the Ashanti. There the cocoa tree thrives, and the country is the largest supplier of cocoa in the world. In fact, the bean has made the Gold Coast extremely prosperous by African standards. Every cocoa farm is owned by Africans.

The forest also yields the prized hardwood mahogany; and in the verdant hills there are gold, manganese, diamonds and bauxite. Only the Soviet Union exports more manganese than the Gold Coast; and the bauxite deposits are enormous. To extract aluminum from bauxite, however, requires tremendous amounts of electricity. The Volta River is being harnessed to supply the necessary power. For many years the dry, remote Northern Territories were almost forgotten, inhabited only by rather primitive tribes. They lived on the rolling savanna in baked-mud huts and worked the land only for their own needs. However, modern mechanical agriculture is moving into the area. Farmers and their families from overpopulated districts elsewhere are being resettled there, to produce more food for the whole Gold Coast.

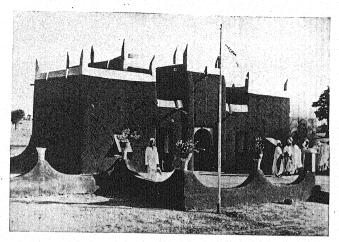
Sierra Leone Is Founded

Sierra Leone was founded in 1787, nearly fifty years before the abolition of slavery by Great Britain, as a settlement for freed slaves. It is the oldest British colony in Africa.

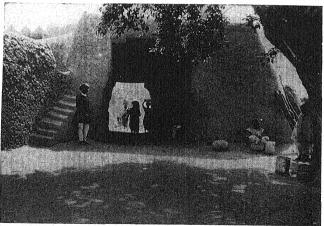
Though vast mangrove swamps also guard this coast, Freetown, port and capi-



HOUSECLEANING presents no problems in Nigeria. When the floor becomes dirty, neighbors simply lift the grass house and carry it to a new and cleaner location.



THE EMIR'S PALACE in Katsina, a town in northern Nigeria which was the cultural center and capital of an ancient Hausa state that flourished during the fourteenth century.



CLAY WALLS encircling Kano are pierced by more than a dozen gates. The walls, which are now falling into decay, were originally built for the defense of the Nigerian city.

BRITISH AFRICA

tal, has the best natural harbor in West Africa. A winding, narrow-gauge rail line runs east from Freetown almost all

the way across the country.

Most of the people are farmers who raise only enough food for themselves. They add to their income by producing or collecting palm oil or kernels, piassava fiber, ginger, kola nuts, cocoa and coffee. A major effort is being made to increase the production of the staple food, rice, by clearing the swamps for paddies.

Minerals are abundant in Sierra Leone, especially iron ore and diamonds. Some exceptionally large diamonds have been found. One weighing 770 carats is thought to be the largest stone ever taken

from an alluvial deposit.

The Valley of the Gambia

Gambia is only a narrow strip stretching inland about two hundred miles along both sides of the Gambia River. The waterway is navigable to the eastern border, 202 miles upstream from Bathurst.

the capital. Like Sierra Leone, Gambia has an extremely hot, unhealthy climate. Malaria is rife.

Gambia is practically synonomous with peanuts, for the crop occupies the largest acreage and provides almost the only export of the territory. Because of the easy transportation provided by the river, many "strange," or migrant, farmers come into Gambia from nearby territories each year simply to raise a crop of peanuts.

British East Africa

The territories usually called British East Africa are Kenya, Uganda, Tanganyika (a UN trusteeship) and the Zanzibar Protectorate. This area is part of "high Africa," a great uplitted land mass stretching from Ethiopia southward into the Union of South Africa. Steep scarps, or cliffs, rear from the coast and at irregular intervals on the plateau. Mighty rivers drain inland. Through this area runs the Great Rift Valley, a tremendous depression in the earth's crust that extends all



SITISM INFORMATION SERVICES

BROAD-BEAMED CANOES bring traders and their wares to Bathurst. The capital of narrow Gambia is situated on sandy St. Mary's Island near the mouth of the Gambia River.



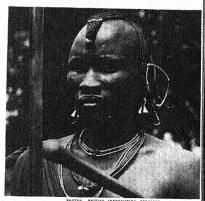
IN KENYA, archaeologists are unearthing the ruins of Gedi. The forgotten city, near Malindi, may have been built by Arabs who moved to East Africa late in the twelfth century.

the way from Syria to Mozambique. It is not a single trench but splinters into a vast system of steep valleys. Long, deep lakes nestle in these rifts; and great volcanoes, some still active, rise from them. Lake Victoria, as large as Scotland, lies on the plateau between the two main rifts.

The narrow coastal zone of all British East Africa is hot, humid and unhealthy. In the highlands, at 5,000 to 9,000 feet above sea level, however, the climate is temperate and attractive to people who are used to cool lands. Most of the area has two rainy seasons; but too little rain and great changes from year to year in total amount are the usual rule.

Land of the Shining Mountain

Kenya, Land of the Shining Mountain, lies astride the equator. Yet glaciers gleam among the peaks of Mount Kenya. It is the second highest mountain in all Africa, soaring boldly above the plateau



MASAI WARRIOR of British East Africa. Plaited hair is the mark of a fighting man. However, the Masai are peaceful today.

to a height of 17,040 feet. Between 5,000 and 12,000 feet, its slopes are thickly forested with cedar, camphor and bamboo.

The great "shining mountain" is in south-central Kenya. To the southeast and northeast are arid plains, where little but thornbush thrives. Few people live on these plains, though some farming is carried on in the southeast where water is available. Only occasional herdsmen wander in the northeast. The northwest section is also rather dry and low, though the monotony of the landscape is broken by several mountains and the dark waters of Lake Rudolf in the eastern rift valley.

It is in the southwest part of Kenya that about 85 per cent of the people live. Here are the cool Kenya Highlands, sloping up to ten thousand feet, from which still higher peaks and ranges thrust toward the sky. The highlands are one of the few places in tropical Africa where white settlement has been successful. Farms owned by Europeans produce a high percentage of the commercial crops and livestock of Kenya. Africans, however, make up 97 per cent of the total population. Out of the remainder, besides Europeans. there are immigrants from India and their descendants-who do much of the storekeeping, clerical and artisan work-and Arabs.

Though Kenya is largely agricultural, less than a quarter of its area is suitable for cultivation. On European farms, wheat, corn, sugar cane, tea, sisal, pyre-thrum (used in insecticides) and coffee are grown. The Europeans also produce milk, butter and beef. Africans are largely subsistence farmers (raising only enough for themselves) and provide labor for the European farms. On their own plots they raise corn, sorghum, millet and beans, the staples of their diet.

Safaris Start from Nairobi

Nairobi, capital of Kenya, is British East Africa's largest city. In the midst of big-game country, it is an outfitting center for safaris. Nearby Nairobi National Park is a game reserve—lions, hip-popotamuses, giraffes, antelopes. The capital is on the Kenya-Uganda Railroad.

which connects it with Kenya's main port, Mombasa. In its fine harbor, modern vessels and Indian dhows ride at anchor in striking contrast. Originally an Arab and Persian settlement, Mombasa still has an Oriental air.

Soil erosion, overgrazing and overcropping are problems common to both African and European areas. The greatest trouble in the 1950's, however, was the savage Mau Mau revolt. The members of this secret society are drawn almost entirely from the Kikuyu tribe, the largest and generally most advanced African group in Kenya. The root of the problem is land hunger, intensified by superstition and racial friction. By terrorizing the white settlers, the Mau Mau hoped to drive them out. Murder stalked the Europeans and the Kikuyus who remained loyal. Yet the white people to whom Kenya is home are determined to stay.

Uganda's Lakes and Mountains

Uganda lies west of Kenya and on the northern shores of Lake Victoria. Here the East African plateau rises from 3,000 to 6,000 feet. On the western frontier with the Belgian Congo, however, is a deep rift valley, partly filled by the waters of Lakes Albert, Edward and George. Rearing up from the valley are the snow-capped masses of the Ruwenzori Mountains—the "Mountains of the Moon" of old legends.

The White Nile begins its journey northward from Lake Victoria. Just below the outlet from the lake, at Jinja, the river drops slightly (about sixteen feet) to form Ripon Falls. A mile and a half farther down is the eighty-five-foot-high cascade of Owen Falls—which Africans call "sounding smoke." In April 1954, Queen Elizabeth opened the great Owen Falls Dam. It provides cheap electric power for Uganda, which has no fuel, and also makes more water available for the Sudan and Egypt.

Elephants and buffaloes are found almost everywhere in Uganda; and the rivers and marshy lake shores harbor crocodiles and hippos.

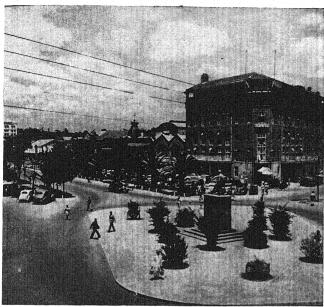
There are almost no white settlers in



A CHIEFTAIN OF GAMBIA presides over his court with the dignity and pomp of the kings of old. The crown, resembling the British crown, is of gold, studded with precious stones and mounted on ermine and velvet. By not wearing a shirt be reminds his people that he has the strong shoulders and arms of the hunter and fighter.



KIPSIGIS WOMEN of southwestern Kenya. For a ceremonial dance, they wear an odd combination of tribal attire and European dress—monkey fur, woolen stockings and cotton prints.



RITISH INFORMATION SERVICES

DELAMERE AVENUE, one of the principal thoroughfares in Nairobi, capital of Kenya. The statue is of Lord Delamere, who helped to develop Kenya in the early twentieth century.

Uganda, and the fertile soil is cultivated by Africans. Cotton and coffee are the most valuable cash crops. Bananas are grown for food in the rather wet area around Lake Victoria. Toward the north, grains are the chief food crop.

One of the most highly developed tribes in Africa is the Baganda. They occupy about one-fifth of Uganda, just north of Lake Victoria. Their territory is called Buganda; their language, Luganda; and a member of the tribe is a Muganda When the Europeans arrived, the Baganda already had a well-developed political system. The British have continued to govern the land through the kabaka, or king, and his lukiko, or council.

Buganda is a region of innumerable

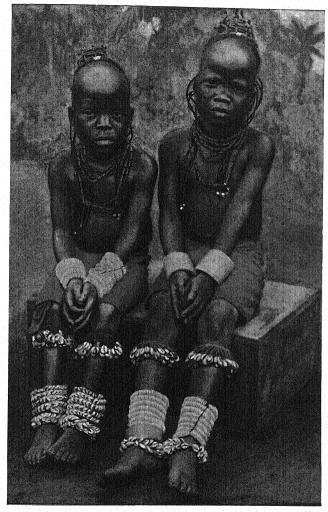
flat-topped hills. On the lower slopes are the homes of the people, set among banana trees. Farther below lie the fields of cotton. Many of the Baganda own livestock, which they tend with care.

Another interesting group, the Bakiga, inhabits the hilly country to the south-west. They are intelligent farmers and understand the need to keep the soil from being worn away. Their hill slopes are beautifully contoured.

Uganda is not an important producer of minerals, though a large copper mine has been developed in the Ruwenzori Mountains. Industry had not developed far beyond cotton gins and sugar mills until the Owen Falls Dam was built. Manufacturing is now bound to grow.



IN KENYA COLONY, it is the custom for a man to buy his wife from her father. This Kikuyu man had to pay eight cows, ten goats and twenty jars of native beer for his bride.



NIGERIAN CHILDREN, like these little girls, wear few clothes, even when dressed in their best. Their heads were bound when they were babies and grew into this unnatural shape.

The chief towns of Uganda cluster around Lake Victoria. Entebbe, the administrative center, has botanical gardens, a technical school and an airport. Kampala is the chief business city and the site of Makerere College. On the outskirts is Mengo, headquarters of the native government of Buganda.

Bush-clad Tanganyika

Tanganyika, a United Nations trusteeship governed by Great Britain, is largely undeveloped. The dry highlands are clad mostly in bush; and the people are among the most magic-ridden on the whole continent. Most of them are Bantu, though there are Masai and other Hamitic tribes to the north. As elsewhere in East Africa, Swahili is the lingua franca—the tongue used for business transactions.

The fairly wide coastal plain of Tanganyika is dotted with sisal plantations. In fact, the strong fiber is the major export. On this coast is the capital and chief seaport of the Indian Ocean, Dar es Salaam. The name means "haven of peace." Once the harbor was almost landlocked; but today it has modern, deepwater berths. From the port, a railroad extends across the country to Lake Tanganyika.

Behind the coastal zone the country rises gradually to the plateau. This is sliced through the middle by the eastern rift valley; and on the western border, the waters of Lake Tanganyika fill another trench.

The glory of Tanganyika is Mount Kilimanjaro (19,505 feet), Africa's highest summit. It is in the northeast, near the Kenya border. In the same region are another extinct volcano, Mount Meru, and the active cone of Mount Lengai. At the base of these mountains, lions are the goal of big-game hunters.

There are about two hundred distinct tribes in Tanganyika. Some of these people are settled farmers who grow corn, sorghum, rice, beans, cassava and peanuts, mostly for local consumption, and cotton, coffee and tobacco for export. Often land is worked with only a hand hoe.

A notable exception to this primitive agriculture is that of the Chagga tribe. They grow much of the coffee on the rich soil of Kilimanjaro's slopes, and have a well-developed co-operative organization for marketing and supply.

Other Tanganyikan tribes are pastoral, with huge herds of cattle, sheep and goats. Were it not for the tsetse fly—which carries a parasite deadly to cattle and is still a curse in tropical Africa—the pastoral tribes would be more widely spread. Most famous of these groups is the Masai, who have a 41,000-square-mile reserve, partly in Kenya. They live mostly on meat, milk, and blood drawn from the living animal. A blanket slung over the shoulder serves them for clothing. The warriors smear their bodies with red ochre and fat, and arrange their hair in claystiffened pietails.

Diamonds are Tanganyika's most valuable mineral. The mine near Shinyanga, in the northwest, is said to be the most productive in the world.

Clove Islands-Zanzibar

The Zanzibar Protectorate consists of the two little islands of Zanzibar and Pemba, separated from the Tanganyika coast by the twenty-mile-wide Zanzibar Channel. Zanzibar itself is Africa's largest tropical island; and the harbor of the town of Zanzibar is one of the best in the world. It has long been famous for its supply of apparently inexhaustible fresh water.

For two thousand years the islands have been familiar to Arab mariners; and they are governed today through a sultan. The population, nevertheless, is about 80 per cent African. Narrow, winding streets, whitewashed mosques and open shops give the town of Zanzibar an Arabian Nights appearance. The yearly trading visit of gaily painted dhows from Arabia is a thrilling sight. As many as three thousand of these vessels come on the winter monsoon and return with the summer winds.

The islands are so fertile that although they are densely populated "starving requires an effort of will." Every bit of

RRITISH AFRICA

land is cultivated. Cloves, however, are Zanzibar's most valuable and most famous product. If the wind is in the right direction, the spicy fragrance of the groves can be detected a mile out at sea.

Home of Somalis

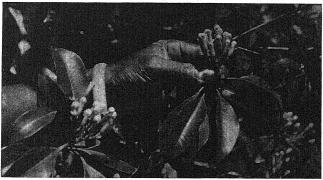
British Somaliland is on the eastern "horn" of Africa, edging the Gulf of Aden. In their hot, dry, barren land, the Somalis eke out existence by raising camels, sheep, goats and cattle on the interior plateau. The torrid coastal plain, called Guban (meaning "burnt"), is shunned except for a few ports. In the mid-1950's it was planned to sink many more wells to improve the water supply and to extend the small irrigated area.

The Fertile Seuchelles

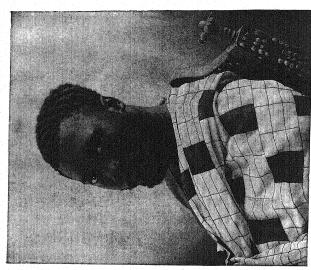
About a thousand miles due east of Kenya lie the ninety-two little islands that make up the crown colony of the Sevchelles and dependencies. The central group, the Seychelles proper, are masses of granite with mountainous backbones. The outlying islands are flat and formed of coral. Centuries ago all the islands were uninhabited and were a haven for pirates of the Indian Ocean. The people

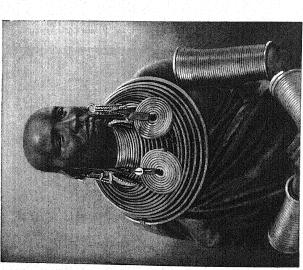


PICKING RIPE CLOVES on a plantation in Zanzibar, which is truly a "spice island," lying twenty miles off the coast of Tanganyika.



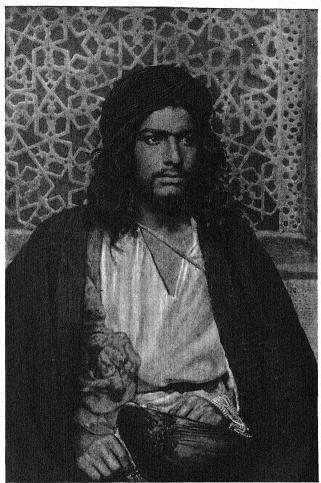
FLOWER BUDS of the clove tree in just the right state to harvest. The spice is the dried buds. Oil also is obtained from the tree, for use in medicine and perfume manufacture.





A MASAI WOMAN should have the lobes of her ears stretched until they will meet over her shaved head. Her stone ear plugs, ear-rings and other consments, including many pounds of iron wire around her neck and arms, she may not remove during her busband's lifetime.

NANA PREMPEH ruled over the Ashanti, now part of the Gold Coast, until 1896, when he resisted British rule, was defeated and exiled. When the British established the Federation of the Ashanti in 1935, his nephew, Otuo Sir Osei Agyeman Prempeh II, was placed at its head.



(C) E. N. A.

THIS WANDERING DERVISH of north-central Africa carries a polished gourd as a begging bowl. Dervish is Persian for "seeking doors" or begging, and in Islam generally implies membership in a religious fraternity. Members are distinguished by their garb. Each has its ritual, which may include whirlings and the self-torture of the howlers.



AFTER A RAIN in Dar es Salaam (haven of peace), capital and seaport of Tanganyika. The harbor is almost landlocked and there are deep-water berths for ocean-going vessels.



SOMALI TRIBAL POLICEMEN pose beside a signpost near Isiolo, a small village in the Northern Frontier District of Kenya. It is a vast region that gets little rainfall.

there today are largely the descendants of European settlers (mostly French) and Africans. They speak French or a Creole dialect. Fertile and with plenty of rain. the Sevchelles produce coconuts and cinnamon in abundance. Copra (dried coconut meat) and cinnamon-leaf oil are exported in considerable quantity.

Central African Federation

Since 1953, Southern and Northern Rhodesia and Nyasaland have been loosely joined in the Central African Federation. It is a landlocked area, high on the African plateau. Thus it is cool enough to attract white settlers.

Most of this vast tableland is a rather dry sayanna, or veld, which, in its natural state, is covered with grass and occasional woods. There are few navigable waterways. Rail and road networks need to be extended to handle the increased traffic that has come with developments since World War II. With no coast of its own, the federation relies upon ports in Portuguese Mozambique for handling its over-

Nyasaland, the smallest partner in the federation, has more than a third of the population. The territory includes all of Lake Nyasa, which lies in the southernmost arm of the Great Rift Valley. The lake is 1,500 feet above sea level and the mountains that flank it vary from 3,300 to 10,000 feet. The lowlands are very hot, but the uplands are more comfortable and healthier. Just north of the capital, Zomba, the Zomba Plateau rises to 7,000 feet and is a cool summer resort.

Nyasaland is mostly a farming country. The Africans, chiefly Bantu, grow corn, sorghum and cassava for themselves. Tobacco, tea, tung and cotton are produced for trade, though the total value of exports is far below that of the Rhodesias. However, Nyasaland supplies more than half the pipe tobacco consumed in the

United Kingdom.

In Northern Rhodesia the tableland is broken by hills, sometimes chains of them. West of the Luangwa Valley the Muchinga Mountains form part of a great escarpment (long, high cliffs), where peaks occasionally tower as high as eight thousand feet. Though most of the rolling upland is an open, grassy plain, there are

large, swampy areas.

Northern Rhodesia has a wealth of minerals. The Copperbelt runs along the border with the Belgian Congo. It is a strip only sixty-five miles long and half again as wide. Yet it is one of the leading copper producers in the world. Africans were digging the ruddy metal there as early as the 1300's. In the 1920's, however, the belt was chiefly the home of lions, elephants and leopards. Today its towns boast golf courses, swimming pools. modern stores, motion-picture theaters and other luxuries of civilization.

Copperbelt Riches

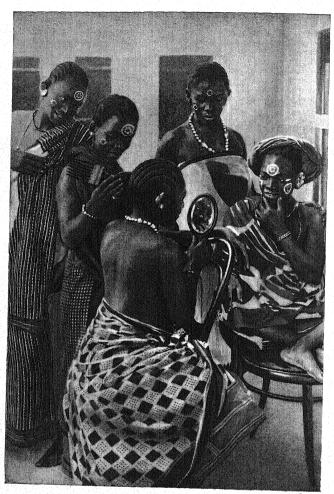
The relatively rich ores of the Copperbelt also contain cobalt and uranium. However, copper accounts for more than 90 per cent of the value of Northern Rhodesia's exports. South of the Copperbelt is Broken Hill, an important lead,

zinc and vanadium producer.

Large numbers of Africans work for the mining companies, and others migrate to nearby territories for work. means fewer farmers, and agriculture as a whole suffers. Many of those who live in the wooded savanna practice what is called chitemene. As the soil is exhausted, they shift from plot to plot. When a new garden is prepared, they fell trees or lop off branches. The wood is collected and burnt to provide a rich ash seed bed. Although it is a wasteful method of enriching the soil, no satisfactory alternative has been found. Accidents are not uncommon, for the men vie with each other in daring as they hack at the trees.

On the Barotseland plains and in other grassy areas, the Africans follow a kind of soil-selection system. It shows considerable understanding of the relation between soil and the vegetation that grows A farmer may have as many as six distinct gardens, each planted with the crop best suited to the spot.

Lusaka, the capital, is almost exactly in the center of Northern Rhodesia. Two



SWAHILI WOMEN of Zanzibar take great pains with their appearance. They paint designs on their cheeks and foreheads and dress their hair elaborately. Their long toothed comb is like that used by the Fiji Islanders. Because these girls are a mixture of two races, Arab and Negro, one sister may be dark with woolly hair, another lighter with straight hair.



IN ZANZIBAR and on the neighboring mainland live the Swahilis or "coast people." They are the descendants of Arabs who generations ago came here as traders and married Negro inhabitants. They speak archaic Bantu mixed with Arabic and use Persian, Hindu, Portuguese, German and English words besides. Their color varies and their features are often Semitic.



THE OWEN FALLS DAM, in Uganda, as it was being constructed. It holds back the waters of the White Nile River not far below the outlet of the stream from Lake Victoria.



SURVEYING THE WORLD from atop bales of sisal in a Tanganyika warehouse. The tough fiber, from which extremely strong twine is made, is one of the territory's chief exports.



A MOMBASA WITCH DOCTOR is made up to look terrifying. From his dead-white face, his black-encircled eyes gaze ominously. A flaring feather headdress completes the outfit.



as elephants. They spend most of their time under water with only their peyes and nostrils above the surface, or if they dive while foraging for plants, they more to the top every few minutes. Their teeth provide ivory, their hide makes whips and their flesh is eaten by the matives. HIPPOPOTAMI comes from the Greek meaning "river horses." They may have been the behenoths of Scripture, although they are no longer found in the Jordan Valley. There is a pygmy variety about six feet in length, but these denizens of the Zambezi River are nearly as large

highways meet here, from Tanganyika and from Nyasaland. Livingstone, named for the famous missionary and explorer David Livingstone, is the take-off point to see nearby Victoria Falls.

The tremendous cascade is a drop in the Zambezi River, the boundary between Northern and Southern Rhodesia. In this part of its course, far inland, the river carves its way through deep gorges. An odd fact about the falls is that the level of the country is the same both above and below. With a mighty roar, the water plunges into an enormous crack, which is more than a mile at right angles to the course of the river. From the lip of the cataract to the lip of the cliffs opposite is a distance of less than 400 feet. Higher and wider than Niagara, Victoria Falls extend the whole length of the mile-wide chasm and drop, on the average, about 350 feet. The spray rises so high and the water causes the earth to tremble so that Africans call the falls the "smoke that thunders." The Zambezi breaks out of the slit through a narrow opening, the Boiling Pot, in the long wall of cliffs opposite. From there it foams into a winding canyon.

Southern Rhodesia

In Southern Rhodesia the uplands are highest from northeast to southwest and slope off on either side. The high veld is about four thousand feet above sea level, and takes up about one-fourth of the total area. It has the most congenial climate, the highest rainfall, the densest population and the most advanced economic development in the federation.

The possible range of crops in Southern Rhodesia is very great, but tobacco is by all odds the most important commercial crop. Tobacco products make up more than a third of the total exports; and Salisbury, the capital of both Southern Rhodesia and the federation, has become the greatest single tobacco market in the world. Europeans own the tobacco farms, Southern Rhodesia having by far the largest number of white settlers of any British African territory. However, most of the farms are extensive ranches,

and the total plowed area is less than a million acres. Many Africans work on the European farms. On their own land, Africans often outshine white farmers. They practice crop rotation and get larger yields from poorer soil.

What is called the low veld consists of a narrow strip in the Zambezi Valley and a broader tract in the southeast. These sections are unpleasantly hot and are usually avoided. Some day, perhaps, these valleys will be irrigated.

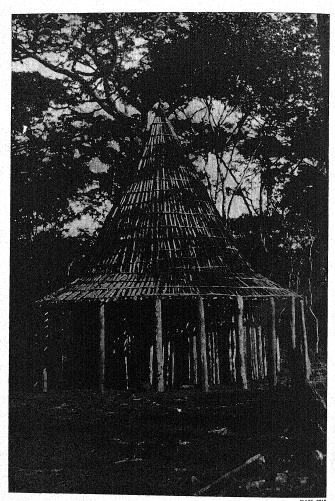
In Matabeleland

The most interesting African group is the Matabele, a Bantu-speaking people of Zulu origin. Once fierce warriors, they were driven from the south and settled north of the Limpopo River, on the southern border of Southern Rhodesia. This region is called Matabeleland. Today the people are peaceful farmers and herdsmen. Bulawayo, Southern Rhodesia's lively commercial and industrial center, is in Matabeleland.

Mining in Southern Rhodesia is less important than in Northern Rhodesia, but there is a greater variety of minerals. Chrome and asbestos are shipped abroad. High-grade iron ore is mined and made into steel in a small plant near Que Que, in Matabeleland. It is thought that there are enormous reserves of coal in a number of areas. So far, the only large source of coal in the whole federation is at Wankie, seventy miles southeast of Victoria Falls.

This coal is produced at exceptionally low cost. As fuel for power, it is important to railroads and industries. It also supplies copper smelters in both Northern Rhodesia and the Belgian Congo. From Wankie to the Copperbelt, however, is a long haul, expensive and wasteful of transport.

For further industrial expansion, Southern Rhodesia needs more power, and the Copperbelt needs a source of power closer at hand. In 1954, to meet these demands, the federation government began a project that will harness the Zambezi and Kafue rivers. The Zambezi is to be dammed in the immense Kariba



HOUSE IN THE ROUND—a partly finished native hut, Northern Rhodesia. Tree-trunk supports are in place, and branches tied together for a roof. It will be plastered with mud and thatched.

BRITISH AFRICA

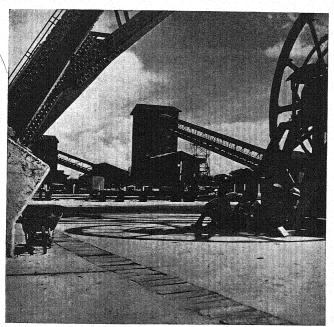
Gorge, more than a hundred miles below Victoria Falls. About another twentyfive miles downstream, a dam will be constructed where the Kafue joins the Zambezi. The Kafue winds down from the Copperbelt. When completed, these will be two of the world's largest hydroelectric installations.

Railroad construction was also going forward rapidly in the 1950's. Heretofore, the Rhodesias had to rely on Beira, in Portuguese Mozambique, as the nearest port. The only line was a single-track railroad, and the harbor was inadequate. Bypassing Beira, a double track will connect the Rhodesias (and also the rich mineral belt of the Belgian Congo Katanga) with the port of Lourenço Marques, in Mozambique. This port has a great sheltered bay capable of unlimited development and is by far the best harbor in Africa south of the equator.

All in all, British Africa is showing the rest of the continent how to use its rich resources. Even more important, perhaps, it is demonstrating in many areas how to meet the Africans' growing demands for more say in how they are to

be governed.

By WILLIAM A. HANCE



SURFACE WORKINGS of a mine in the fabulous Copperbelt of Northern Rhodesia. As the resources of the area are being developed, modern towns are springing up in the once wild country.

BRITISH AFRICA: FACTS AND FIGURES

GAMBIA

Crown colony and protectorate administered by a Governor, and Executive and Legislative councils. Total area, 4,067 square miles, and population, 279,686. Chief export is peanuts. population, 279,686. Chief export is Population of capital, Bathurst, 21,150.

SIERRA LEONE

Colony and protectorate under a Governor, and Executive and Legislative councils. Has a constitution. Total area, 27,925 square miles, and population, 2,005,000. Leading exports are diamonds, palm oil and kernels, iron ore, kola nuts, ginger and piassava. Imports: textiles, tobacco, coal, bags and sacks. Railway mileage, 336; 13,100 miles of railway telegraph and telephone wires. Government and mission schools. Population of capital, Freetown, 70,000.

GOLD COAST

Comprised of Gold Coast and Ashanti colonies and Northern Territories Protectorate and Togoland. Under a constitution, governed by a cabinet and a Legislative Assembly. The prime Total area, 91,843 minister is an African. square miles, and population, 4,111,680. exports: cocoa, gold, manganese, diamonds and imber. Length of railways, 535 miles; of all-weather roads, 2,992 miles; of telegraph wires, 4,918 miles. Population, towns: Accra (capital), 136,000; Kumasi, 78,500.

NIGERIA (Colony and Protectorate)

Under a constitution, governed by a Council of Ministers and a House of Representatives. Total area, 373,000 square miles; population, 24,330,000. Leading exports: cocoa and other food products, gold and other minerals, tobacco and rubber. Imports: cotton textiles, iron and steel products, salt and fish. Population of chief towns: Ibadan, 335,000; Lagos (capital), 230,-000; Kano, 107,000.

SOMALILAND PROTECTORATE

Legislative and executive authority is vested in a Governor. Area, 68,000 square miles, and population, 700,000. Leading industry is stock raising. The chief towns are Hargeisa, the capital, and Berbera.

UGANDA PROTECTORATE

Administered by a Governor with assistance of Executive and Legislative councils. Area, 93,980 square miles, and population, 5,125,000. Leading exports are cotton, coffee, cottonseed and tobacco. Capital, Entebbe, 7,231.

KENYA COLONY AND PROTECTORATE

Administered by a Governor, assisted by Executive and Legislative councils. Total area, 224,960 square miles; population, 5,700,000. Leading exports are sisal, coffee, hides, skins, wattle extract and pyrethrum. Population of capital, Nairobi, 134,043.

CENTRAL AFRICAN FEDERATION

Formed October 23, 1953, by a constitution uniting Nyasaland, Northern Rhodesia and Southern Rhodesia. It is administered by a governor general and an elected Central Federal Assembly. Each member of the union has its own local government.

The federation produced a single territory of about 500,000 square miles, with an African population of about 6,287,000.

Nyasaland exports include tobacco, tea, cotton, pulse and tung oil. Chief towns, popula-tion: Limba, 12,608; Zomba, 7,526.

Northern Rhodesia produces much copper, zinc and lead, its copper ores being the richest in the world. Chief town, population: Lusaka,

Southern Rhodesia. Farming and dairving are profitable; gold and other mineral resources are abundant. Chief towns, population: Salisbury (capital of the federation), 40,510; Bula-

wayo, 32,269. A new railway is under construction to allow the Rhodesias access to a second port, Lourenco Marques, in Portuguese Mozambique.

ISLAND PROTECTORATES

Zanzibar and Pemba. Two major islands off the coast of Tanganyika. Total area, 1,020 square miles; population, 260,000.

Seychelles and dependencies. Comprising 92 islands, 1,000 miles from Kenya. Total area, 156 square miles; population, 36,613.

UNITED NATIONS TRUSTEESHIPS: FACTS AND FIGURES

Former German territory, now divided between France and Great Britain. British area, about 13,041 square miles; population, 404,000. Administered as part of the Gold Coast.

CAMEROONS

Former German territory now divided between France and Great Britain. British area, 34,080; population about 1,084,000. Administered as part of Nigeria. The chief town of the British Cameroons is Buea.

TANGANYIKA

Former German possession, now administered by Governor, and Executive and Legislative councils. Area, 362,675 square miles; population, 7,707,000. Leading products: sisal, cotton, gum and diamonds. Capital, Dar es Salaam, 99,140,

IN THE HEART OF AFRICA

Among the Forest Dwellers of the Congo

The Congo, Africa's second longest river, flows almost three thousand miles through the heart of the continent and, with its mighty tributaries, taps the vast territories of the French and Belgian Congo and Angola, Portugal's largest colony. Thick forests cover huge portions of the land drained by the Congo, and very little was known about these mysterious areas before the explorations of Livingstone and Stanley. Today, however, the Congo is no longer a region of mystery. Its wealth of resources has turned the eyes of the world upon it and upon the interesting people who inhabit is

T N the year 1482 or 1483 a little fleet of galleons led by Diogo Cao went cruising along the west coast of Africa. The huge sails were emblazoned with large red crosses, and from the mastheads fluttered the banner of Portugal. For months the fleet had sailed slowly along that low coast, with its lines of palm trees and with the white surf breaking ceaselessly upon the yellow sand. The swampy mangrove thickets at the mouths of the Niger were passed; the vast Cameroon's volcano was sighted and the Equator crossed. Then the mouth of a wide river opened out before the adventurers.

From the natives, the adventurers learned that the river was called the "Kongo," and that the country just to the south of it was ruled by a great chief called M'wani Kongo ("Lord of the Kongo people"). The Portuguese then began to trade with him, and eventually established a Jesuit Mis-

sion among his people.

The Portuguese did not go far up the river because of the rapids which barred their progress, and also because of the savage tribes which attacked the expeditions. For four hundred years little was known of the river. In 1876, however, Henry M. Stanley, who had gained fame by his expedition in search of Dr.



BLACK STAR

IN THE COTTON FIELDS OF THE CONGO

Quick, careful hands remove bolls from a cotton plant in the lower plateaus of Kivu province, eastern Belgian Congo. In the higher reaches of Kivu are thriving plantations of cinchona, from which we get quinine, and coffee.

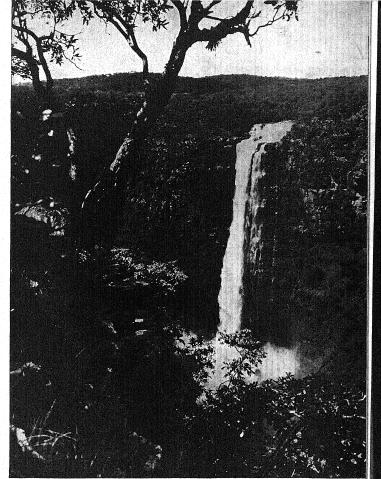
> David Livingstone, the Scotch missionaryexplorer, was again in Central Africa and came upon a river, called by the natives Lualaba (Great River), which he thought might be the Upper Nile and determined to explore it.

> He came in from Zanzibar on the east coast in time to start in October from Nyangwe, a point on the Lualaba just west of the upper part of Lake Tangan-



MOTHER AND SON AND A SEWING MACHINE IN AN ANGOLA VILLAGE

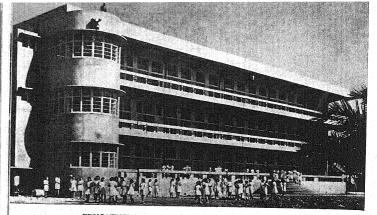
Like a busy housewife anywhere in the world, a woman of Angola welcomes the quickness and precision of a sewing machine. The Angolese perform many of their everyday tasks in the most primitive manner, but when they have the opportunity to use modern appliances and equipment, such as the sewing machine and trucks and tractors, they learn quickly and well.



BELGIAN TOURIST BUREAU

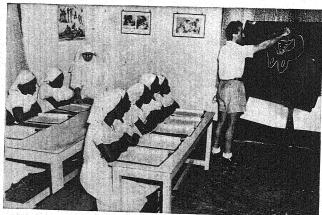
HIGHEST SINGLE-LEAP FALLS IN AFRICA

The little-known Lofoi River, in the province of Katanga in Belgian Congo, sends its waters rushing down the steep side of the Kundelungu Mountain for a sheer drop of 1,260 feet into the valley below. It is said to be the highest single-leap falls on the African continent, exceeded only by the 2,810-foot drop of the Tugela River falls in Natal that makes several leaps.



EDUCATION AND PROGRESS GO HAND IN HAND IN AFRICA

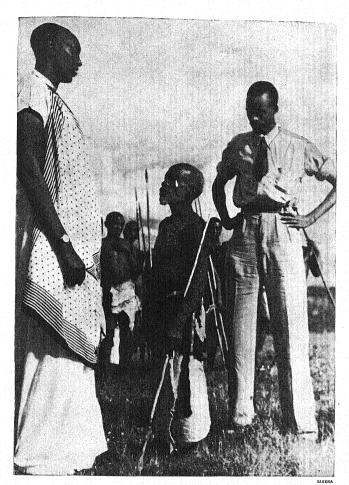
The Marie-José Institute at Elizabethville, Belgian Congo, is an up-to-date junior high school for girls, operated by the Sisters of Charity of Ghent. Although the number of modern schools is steadily increasing in the Belgian Congo, only about one-twentieth of the colony's total population thus far has an opportunity to receive a scholastic education.



PHOTOS, BELGIAN GOVERNMENT INFORMATION CENTER

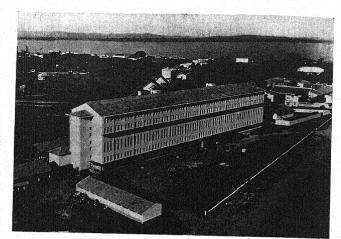
NATIVE NURSES LEARN ABOUT MODERN HEALTH PROTECTION

At this Red Cross school for nurses at Pawa in the Belgian Congo, white nurses and doctors in-At this Real cross school for maises at raw in the Deigian Congo, white maises and do These struct the native women in such things as first aid to the injured, hygiene and sanitation. These struct the native women in such things as first aid to the injured, hygiene and sanitation. These native women are eager to learn, and when they return to their villages, they will have the knowledge by which they can improve and protect the health of their people.

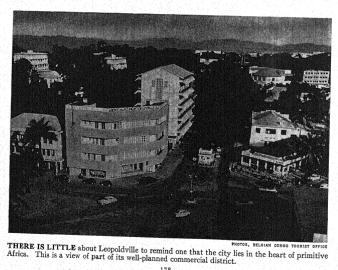


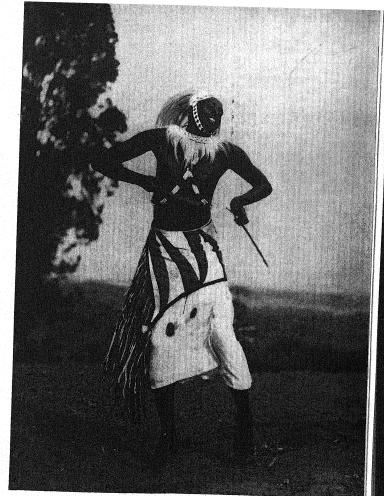
EVERY INCH A KING

The king of a Ruandi tribe and a pygmy chieftain take each other's measure. Ruanda-Urundi is a United Nations trust territory in east-central Africa. It is united economically with Belgian Congo and administered by Belgium. Local law is in the hands of native chieftain invested with Belgian authority. The territory is densely populated and often faced with famine.



 $\label{lem:attleOPOLDVILLE, capital city of the Belgian Congo, a modern, sanitary building houses the colonial government's depot for medical supplies. \\$





BELGIAN GOVERNMENT INFORMATION CENTER

A SINEWY DANCER OF THE WATUSI, DECKED IN TRIBAL REGALIA

The Watusi are among the tallest people on earth; it is not uncommon for a man to attain the stature of seven feet. They herd long-horned cattle among the highlands of Ruanda Urundi. 179

vika. It was a region of equatorial heat and heavy winter rains, where the waterways led through tangled jungle forest made terrifying at night by the howls of beasts and almost equally dangerous by day by reason of the myriad fever-breeding insects and the savage warriors who met them with flights of arrows. The heat was prostrating and food ran low, and the three white men who started with him died of the almost incredible hardships that met them all along the way. Stanley himself was prematurely aged by these experiences, but he was young and somehow managed to pull through.

After a few portages near the start where they had to pass some falls and rapids. the journey could be made entirely by canoe. At times the river widened into muddy swamp lands or lakes bordered by papyrus and other reeds and grasses; but for the most part it flowed through a tunnel of trees. For weeks of travel the Lualaba led them northward. then took a surprising sweep to the westward and southwestward as it became the Congo. The following spring they came to what is now Stanley Pool or Leopoldville, and here the river nar-

rowed from three miles to perhaps threequarters of a mile, to go leaping and thundering for 170 miles over rockwalled cataracts. Below that long detour, during which they had to hack their way through all but impenetrable underbrush, the stream was again navigable; and soon they reached Boma, a port some seventy miles inland. The Congo empties into an Atlantic stained red-brown with river silt, as the stream



Mrs. J. H. Harris

THE MOST FAMOUS BEARD IN CONGOLAND This man is chief of a troublesome folk, but they are proud of him, for plaited and coiled under his chin is his beard. rather thin, but many feet long. Only on state occasions does he uncoil it to the admiring public gaze.

> widens over seven miles of delta fringed with mangrove swamp. Stanley had crossed the African continent from east to west and had traced nearly two thousand miles of navigable waterway. His dramatic published accounts of his adventures were translated into several languages.

A year after his discovery of what has proven to be one of the world's largest rivers, which drains a basin correspond-

IN THE HEART OF AFRICA

ingly vast, King Leopold II of Belgium formed an association for the opening of the Congo basin to commerce. To secure peace and further trade relations with the natives, he made hundreds of treaties with small independent African sovereigns. As a consequence, in 1885 the Congo

Free State was founded with King Leopold as ruler. The state was ceded to Belgium, however, in 1908, and in 1927 its territory was increased by an exchange with Portugal which gave the latter country area for a port in the estuary of the Congo near Matadi.



A GROTESQUE GROVE OF GRAIN CACHES IN PORTUGUESE ANGOLA

Looking every bit like giant mushrooms or, to the more fanciful, like an orchard of lollipops, are the grain caches of Angola. In order to keep the grain out of the reach of animals and vermin, the people weave coarse grasses and leaves into large nets. When they have filled the nets with grain they hoist them to the branches of trees or balance them on long stakes.

The main products of the Belgian Congo proved to be the ivory of elephant tusks and the products of the palm and rubber trees, together with resin, copal and certain vegetable fibers. The Belgians have made successful experiments in the growing of cotton.

Sands That Yield Diamonds

The sands of the Kasai River, a major tributary of the Congo, yield most of the world's diamond supply. Yet the value of South Africa's diamond production is far greater. A larger percentage of South African diamonds are of the quality best suited for jewelry. Most Congo diamonds are discolored or of an imperfect shape; less than 10 per cent can be ground and polished into precious stones.

Whether or not it is of gem quality, diamond is the hardest substance known to man. Oil-well drills tipped with industrial diamonds bore through shelves of rock that resist all other cutting tools. Granite is cut with saws that have diamonds set in their teeth. Diamonds expand only the tiniest fraction when they are heated and are therefore especially long-wearing and accurate when used as bearings in delicate instruments.

Another valuable mineral of the Belgian Congo is pitchblende, a heavy ore that takes its name from its lustrous, pitchblack sheen. The pitchblende of the Congo is concentrated in the southern district of Katanga near Shinkolobwe, a village seventy miles northwest of Elizabeth-ville. For years (until the discovery of rich Canadian deposits) the Belgian Congo was the world's principal source of radium, a radioactive element highly valued in medicine for the treatment of tumors. Other elements in pitchblende include lead, the rare earths and, most important, thorium and uranium.

Uranium is the fuel of the atomic age, and the production of atomic energy has become one of the primary concerns of all the great nations of the world. There is a possibility that thorium, as well as uranium, can serve as a "breeder" of the isotopes that release atomic energy. Since the fields of Katanga yield both metals,

the Belgian Congo should, as she has done until now, continue to furnish a large portion of the raw materials that are needed for atomic research.

What of the people of the Congo? Let us journey up the river for perhaps a thousand miles. Here and there the native villages peep from amid the close green foliage. Our little steamer blows her whistle, and in a moment we see dusky figures gathering on the beach. Several dug-out canoes put out to meet us. The former warriors have become peaceable fisherfolk.

Our steamer slows down and drops its anchor. As we go ashore, the people crowd around us, moved by curiosity. The day has long passed when they feared the white man, but a chance visit never fails to create excitement. They wear little clothing, and their chocolate-brown bodies are tattooed. They have their teeth filed to points, like the teeth of a saw, and tribal marks are cut on their faces. These marks are cut deeply into the flesh of the cheeks and forehead with a sharp iron instrument. It is a painful process and not infrequently causes blood poisoning.

Large and small dugouts are drawn up on the beach, and fishing nets, attached to wooden frames, lie drying in the sun. Fish traps, too, made of split bamboo or of the cane called rattan, are in evidence. From one dugout the day's catch of fish is just being landed and carried up to the village market. Now the smell of the salt tide mingles with a welcome taint of wood smoke, for beyond the beach is the village with its two long rows of huts facing one another. The village's lower end opens on the shore, but the upper end is closed to enable the villagers to defend themselves in case of attack by neighboring tribes. Behind the village is the primeval forest, extending for hundreds of

Homes of Bamboo and Thatch

The oblong huts are made of bamboo and thatch. It is interesting to watch the people building a hut. First a framework is erected—that is, long bamboo poles are driven into the ground and lashed to-



CHICAGO NATURAL HISTORY MUSEUM

WHEN COMPLETED, the coiled basket will be as firm and strong as any pottery vessel. Basket-weaving is a highly developed craft among native tribes of Portuguese Angola.

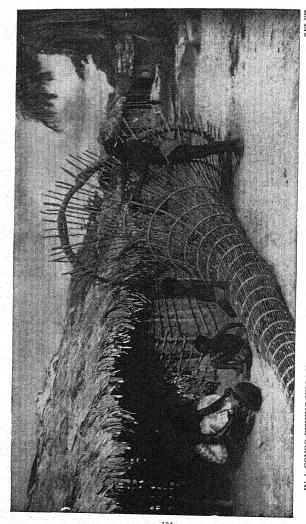
gether with cross-pieces and fiber. Then the big thatched roof of dry palm leaves is added, and last, the framework walls are covered with coconut matting.

Near the houses a space has been cleared in the forest to make gardens in which people grow yams, cassava and other vegetables; and there is likely to be a fragrant plantation of banana trees, their bright green leaves contrasting with those of the mango trees and the palms. The women cultivate the gardens and take the produce to the village, using big funnel-shaped baskets of split bamboo which they carry on their backs. Their task is not a little dangerous, for as a woman stoops to her work it is no uncommon thing for a leopard from the forest to spring murderously upon her.

One strange custom is that the boys, while still quite young, leave home and join in building a hat and keeping house for themselves. They provide food by

catching fish, trapping birds, squirrels and monkeys. They even stretch strings from the trees to catch bats. One of their chief delights is ratting, and many a nice plump field mouse finds its way into their cooking pot. Large hairy caterpillars, ants and beetles are also enjoyed.

There are two people in the village we must certainly visit-the chief and the witch doctor. We exchange greetings. then the chief leads us to his dwelling or the public "palaver house," where he holds a reception in our honor. Two or three European camp chairs may be brought out of the dark recesses of some hut and placed for us, while the chief takes his seat on a stool or in a hammock. We again exchange pleasantries, tell the chief why we have come to his village and make him a present-possibly a hatchet, a piece of cloth or even an alarm clock. In return, he gives us bananas, eggs, yams, coconuts, a couple of chickens or perhaps a goat.



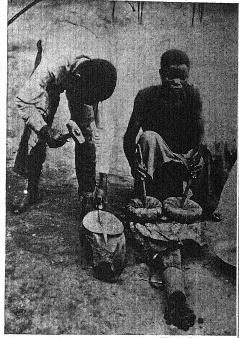
as a weir when placed in a stream. The children watch their mother prepare the midday meal in a deep pottery mixing bowl. IN A CONGO FISHING VILLAGE: A LONG, HORN-SHAPED BASKET MEANT FOR TRAPPING FISH IN THE RAPIDS Before his hut—its walls of reinforced clay, its roof of thatch—the man of the family fastens a cane rod to his fishing basket, which serves

The witch doctor is the priest of the village, and the people fear him because they believe he has power to command evil spirits; but he sells them charms to protect them from wild beasts, sickness, evil men and even those selfsame evil spirits. The people also think that he can bring dreadful diseases upon the village or cause a man to die. He is usually a cunning rogue, able to mix powerful poisons, and is certainly a man to be greatly feared where his enmity is incurred.

The Congo basin is inhabited by many tribes speaking different languages. Some villages are not at all like the one we have described.

Today a belt of valuable mines two hundred miles long extends through the highlands. Lubambashi in Katanga gives Belgium a good supply of copper for world export, and the natives who are partly civilized are kept busy at the mines and smelting works. In the south and east highlands there are also gold, uranium, diamonds, platinum and coal. Though the navigable waterways are still the important highways, short lengths of railroad connect them and there are more than 45,000 miles of roads. There is also regu-

lar air service between various districts. For centuries there were rumors that a race of small black people existed in the heart of Africa, and many travelers and historians of past centuries had mentioned these dwarfs. In 1863-65 P. B. Du Chaillu came upon them. In 1887 Stanley, while passing through a vast forest between the Congo and Lake Albert, found numbers of these little people. Some of them were only three feet in height. They were so small that the explorer often thought his scouts had



EWING GALLOWAY

OUTDOOR BLACKSMITH SHOP in Angola. One man hammers out a knife; the other works a crude bellows.

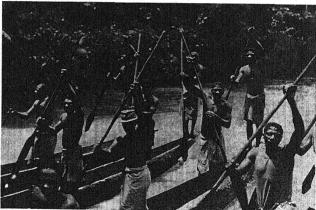
caught children, until he perceived that they were full-grown men and women. The women averaged but four feet in height and none of the men was over four feet six inches.

These tiny black folk live by hunting, and they are extraordinarily skillful at tracking game through the dark, swampy forests and killing it with their bows and arrows. They live in villages of small grass huts shaped like beehives. Stanley found one village of ninety-two huts. But the pigmies were very shy and always de-



A PEACEFUL HOME SCENE

Bandi natives, gathered before their hut in southeastern French Equatorial Africa, take their case during the hottest part of the tropical day. The man in the foreground apparently finds the imported folding camp chair a rather doubtful luxury. Mangoes, a reddish yellow fruit that grows on a tree of the sumac family, can be seen hanging from above.



BELGIAN GOVERNMENT INFORMATION CENTER

AN AFRICAN RIVER SCENE

Natives, balancing with no difficulty in their narrow dugout canoes, stand upright as they paddle along the Loange River in the Congo basin in central Africa. The river, which is over four hundred miles long, has its source in central Angola. It flows north to join the Kasai River, the most important southern tributary of the Congo River, in the Belgian Congo.

serted their villages as Stanley's men approached, though from time to time a few were captured and examined. These villages they abandon when they feel the need to move on, for a time, to where game is more plentiful. The forest dwarfs

are better termed Negrillos.

The vast basin of the Congo does not all belong to Belgium. Thirty-five years before Stanley unveiled the secrets of the river, the French had settlements on the Gabun River, some five hundred miles north of the mouth of the Congo. Then in 1880, De Brazza-for whom Brazzaville, the river port, is named-placed under French protection a portion of the north bank of the Congo, from below Stanlev Pool for four hundred miles to the Ubangi. From here the whole northern bank of the Ubangi to the borders of the Sudan is French. Almost all the northern tributaries of the Congo flow through French territory.

Portuguese Angola

While many northern tributaries of the Congo water French possessions, some of the southern tributaries rise in Portuguese soil. In the fifteenth century, when the mariners and soldier-adventurers of Portugal found the way up the main river blocked by rapids, they turned their attention to the country immediately to the south-the dominions of that King of Kongo mentioned earlier in this article. Long years of exploration, conquest and colonization resulted in the establishment of Portuguese control over a vast tract known as Angola, the capital of which was the ancient port city of São Paulo de Loanda, founded in 1575. (The present capital is Nova Lisboa.)

The highlands of Angola are adapted to the growing of sugar and coffee and the raising of oxen, though the territory has

remained largely undeveloped.

In both the French and the Portuguese Congo the natives, with the exception of the pure Negrillos (pigmies), belong to the great Bantu family, as do most of the Negroid people living in equatorial and southern Africa.

Literally the word "Bantu" means sim-

ply "the people" and is applied to a large number of tribes speaking different dialects. The Bantu tongues make up one of the world's chief language groups. It is believed that originally the Bantus lived in eastern Africa and at some later period pushed their way south and west.



A LADY MILK-SELLER OF CHAD

Each day this Kotoko woman must walk many miles in order to sell her milk in the market of Fort-Lamy. Notice her long, tight braids, which are liberally oiled with butter.



AMERICAN MUSEUM OF NATURAL HISTORY

RATTLE-DRUMS, TOM-TOMS AND HORNS FOR THE TRIBAL DANCE

IN THE HEART OF AFRICA: FACTS AND FIGURES

BELGIAN CONGO

Belgian Colony in Equatorial Africa occupy-ing the greater part of the basin of the Congo River. Administered by the Minister for the Colonica appointed by the King and the Colonial Council consisting of 14 members.

Legislation for the Colony is vested in Parliament. The King is represented in the Colony by a Governor-General. For administrative purposes the Colony is divided into 16 districts grouped into 6 provinces, each with a governor. The estimated area of the colony is 902,-082 square miles; the native population is about 11,073,300; the white population in 1950 was 52,113. The chief products are palm oil, copal, cotton, coffee and maize. Copper, diamonds, tin and uranium are mined. The Congo is the world's greatest producer of industrial diamonds, and its uranium ore furnishes a large percentage of the world's radium supply. Chief exports: copper (ore and crude), diamonds, uranium, palm oil, cotton, coffee, tin; chief imports: machinery, provisions, textiles. State steamship service on the Congo; railway mileage, 1949, 2,949. Length of telegraph line, 4,200 miles. International air service. Capital, Leopold-

FRENCH EQUATORIAL AFRICA (French Congo)
Consists of territories of Gabum, Middle Congo, Ubangi-Shari, and Chad, within the French
Union. Each has a Governor; they have financial
and administrative autonomy and each has an

administrative council. The Lieutenant-Governors are under the Governor-General of French Equatorial Africa who is assisted by a Secretary-General and a Council of Government. Total area, 950,256 square miles; population in 1950 about 4,330,400. Resources largely undeveloped. About 300,000 square miles of tropical forest containing valuable timber. Large numbers of domestic animals are raised. Palm nuts, cacao, coffee and cotton are cultivated. Palm oil, cacao, cotton fiber and timber are exported. Seat of government, Brazzaville.

ANGOLA (Portuguese West Africa)

Portuguese colony administered by a Governor-General, stationed at Luanda. The colony is divided into 16 administrative districts. The area is 481,351 square miles and population in 1947 was estimated at 4,495,000. Chief products and exports are coffee, rubber, wax, oil seeds, sugar, sisal fiber and diamonds. Copper, gold, iron, manganese and salt are found. Half of the country's imports come from Portugal. Railway mileage, 1,442. There are 22,708 miles of highways, and external and internal air services. Capital, São Paulo de Loanda.

SPANISH GUINEA

Spanish colony on the Gulf of Guinea, composed of Fernando Po and several smaller islands, and Rio Muni on the African continent. A Governor administers the colony. Chief town, Bata. Area, 10,036 square miles.

TRUSTEESHIP IN CENTRAL AFRICA: FACTS AND FIGURES

RUANDA-URUNDI

Former German East Africa, now administered by Belgium as a United Nations trusteeship and as a part of Belgian Congo with a

Vice-Governor at the head. Total area, about 19,536 square miles. Capital, Usumbura. Both districts are rich in cattle. Exports are livestock, hides and foodstuffs.

FROM CAPE TOWN TO THE ZAMBEZI

People of South Africa's Cities, Veld and Deserts

Zulus, Boers and the boundless veld are the three things of which we are most likely to think when our thoughts turn to South Africa. The Zulus, under their great leader Chaka, dominated this part of the African continent in the their great reason. Chara, commuted any part of the Armean community are arry part of the nineteenth century; the Dutch were the first settlers, and much of the agricultural prosperity of South Africa is due to their skillful farming. ("Boer" is the Dutch word for farmer, or peasant.) The veld is the open grasslands over which are scattered thousands of prosperous farms. But we shall also visit fine cities, gold and diamond mines, splendid orchards But we shall also visit line cities, gon and diamond mines, specified ordinates and sugar-cane plantations, and primitive peoples such as the Bushmen and the Herreros of the vast Southwest Africa Protectorate.

HE Union of South Africa, down at the tip of the continent where January is the hot month, is divided into four provinces--Cape of Good Hope, Natal, Transvaal and the Orange Free State. The population was estimated in 1946 to be more than eleven million, over half of whom are colored.

The Cape of Good Hope was discovered by the Portuguese navigator, Bartholomew Diaz in 1486, but the first attempt to colonize this pleasant pastoral region was made by the Dutch in 1652. The Cape really became a British colony in 1806, but up to 1820 the majority of the white population was of Dutch descent. Natal was settled by both English and Boers, beginning about 1824, and became a British colony in 1844-45. During 1835-38 many of the Dutch farmers, or Boers, were dissatisfied with the British administration which disapproved of their enslaving the Hottentots, and trekked north. Eventually they created the two Dutch republics of the Transvaal, north of the Vaal River, and the Orange Free State. Gold-mining began in the Transvaal in 1882, and the discovery of gold brought a great increase of prosperity to South Africa—until the outbreak of the South African War (1899-1902).

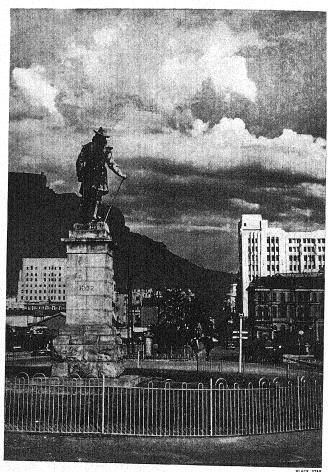
Later, strenuous efforts were made to develop the land more fully and to unite the different elements in the population, the English and the Boers of Dutch descent. These efforts were crowned with success in 1910, when the Union of South Africa was formed. Since the first World War the region that was once German Southwest Africa has also been administered by the Union government under a mandate from the League of Nations. Southern Rhodesia, that part of Rhodesia situated between the Transvaal and the River Zambezi, is also dealt with in this chapter.

We shall start our tour of South Africa from Cape Town, which is at the southernmost end of the African continent. It lies on Table Bay beneath the shadow of Table Mountain, part of which is, as its name suggests, flat-topped, and part of which looks, in the distance, like a lion's head. Cape Town is the oldest settlement in South Africa and an important port of call. In its streets we shall see not only British people and the Boers, with their large, wide-awake hats, but Kaffirs (the natives of the colony) and ' coolies from India and Malava. Native boys and girls, dressed in all sorts of gaudy costumes, sell heather in the streets, for the heather that grows near Cape Town is famous for its beauty and variety of color.

Traveling northward from Cape Town, we pass through a region of rugged, barren mountains and fertile, well-watered valleys in which the earliest European settlers-the Dutch and French Huguenots --made their homes. This land is beautiful and fertile and produces fruit in

abundance, particularly grapes.

North of this again we reach the great tableland of the Karroo, a vast plateau broken up by small hills called "kopjes." It is sparsely covered with small bushes of a dull olive green which are known as



JAN VAN RIEBEECK'S STATUE VIEWS THE CITY WHICH HE FOUNDED

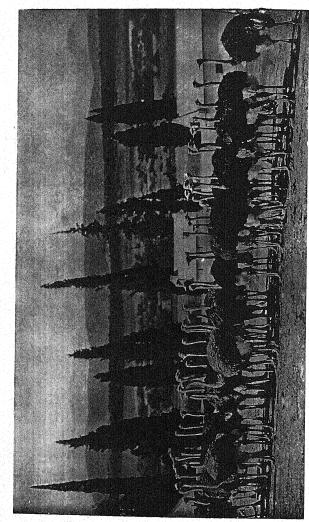
Cape Town is South Africa's oldest city, founded in 1652 by the eighteen-year-old Dutch seaman and adventurer Van Riebeeck, who established it as a stopping place for ships as they rounded the Cape of Good Hope. Today Cape Town is a modern, flourishing seaport, metropolis and vacation resort. Flat-topped Table Mountain commands a magnificent view of the city.



UNION OF SOUTH AFRICA GOVT, INFORMATION OFFICE

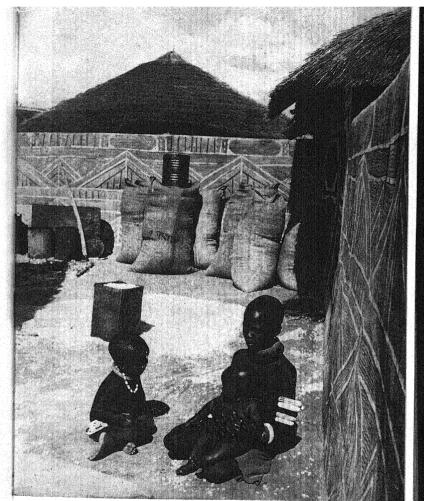
JOHANNESBURG, A MINING CAMP THAT GREW INTO A METROPOLIS

If some of the early gold miners could return to Johannesburg today, they would find it difficult to believe that this modern industrial city has sprung from the cluster of crude shacks that they knew back in the 1880's. This is a view looking down Jeppe Street, a broad thoroughfare lined with smart shops and beautiful, sky-scraping office buildings.



plumes, which are removed several times a year. Except during the breeding season, the ostriches are kept in large fenced-in enclosures. OSTRICH-BREEDING is an important industry in South Africa. There the giant, ungainly birds are raised for their beautiful wing and tail

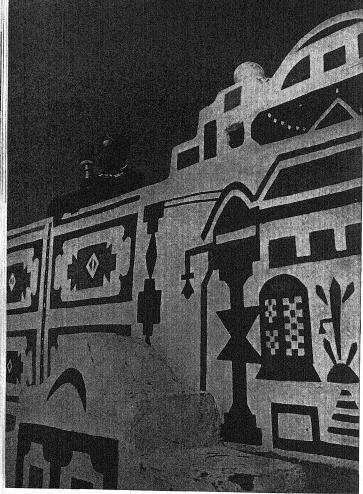
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LACK STAR

CHILDREN OF THE MATABELES, A PEOPLE OF THE TRANSVAAL

Two Matabele youngsters get acquainted while big sister looks on, indifferent to the prattle. Clothes are hardly needed, but necklaces and armlets are worn from babyhood.



SOUTH AFRICAN NATIVE DESIGNS, bold, colorful and imaginative, have transformed a sun-baked mud wall into a primitive art gallery. The woman is of the Matabele tribe.

FROM CAPE TOWN TO THE ZAMBEZI

Karroo bush. The air is clear, and we can consequently see very far. Indeed, rocks and big stones lying on hills several miles away stand out so boldly that we can almost count them. Occasionally we pass farms nestling among the hills, surrounded by small gardens and orchards, and here and there we cross a stream.

Most of the streams, however, dry up during the hot season; then water must be obtained from springs or by artificial means. In the early summer, if there has been a good rainfall, the Karroo becomes a wonderful flower garden, and it is possible to gather as many as sixty varieties of flowers; but this period does not last long. At the end of about two months the flowers are dead and the Karroo is again a desolate waste.

The Karroo is inhabited chiefly by British and Boer farmers, whose homes are often from twenty to fifty miles apart. The native inhabitants are largely Kaffirs,

Hottentots and Bushmen.

All this time we have been traveling through Cape of Good Hope Province, but when we pass over the Orange River we cross into the Orange Free State. Here commences the highest and largest South African plateau, which extends across the Orange Free State, Bechuanaland and into the Transvaal, which adjoins Southern Rhodesia.

World's Richest Gold Field

West of Bechuanaland is the Kalahari Desert, which was once the home of vast herds of game, but is now a useless waste. The Kalahari stretches into the Southwest Africa Protectorate, a desolate region rich in minerals, lying between Angola and Cape of Good Hope Province. In the east of South Africa is a lofty range, the Drakensberg Mountains, and between them and the coast is the province of Natal.

Kimberley and Johannesburg are the two principal cities in South Africa from the point of view of wealth and industry. Kimberley is noted for its diamonds and Johannesburg lies in the richest gold belt in the world. In the gold mines, shafts several thousand feet deep have been sunk in the earth, and galleries have been driven out in all directions at the bottom in the search for gold, of which there seems to be a neverending supply.

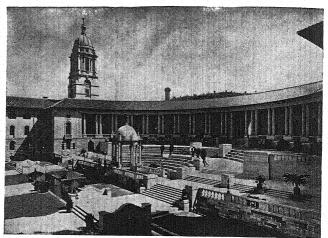
In 1835, as has been already stated, the Boers began to leave Cape Colony with their herds and flocks to settle in a land where they could live as they wished. To reach the Transvaal, where they founded a separate republic, these emigrants had to pass through the country of the Zulus, a warlike people who had conquered a large part of South Africa and possessed a vast army of trained warriors.

Boers Fight with the Zulus

One morning in the summer of 1836 it was reported that the Zulus were advancing to attack the emigrants. The Boers therefore formed their wagons into a square and piled branches between the wheels in order to prevent the natives from squeezing through. Then, with the women and children to load the rifles and prepare the ammunition, they waited for the black army to attack. This it soon did, opening out to right and left in the shape of two horns in order to encircle the wagons. The Zulus came on in thousands, seizing the wagons and trying to wrest them apart, ripping up the canvas covers with their broad-bladed spears and yelling their fierce war cries. But the Boer men and women fought with great determination and at last beat off the enemy. The Zulus, however, took away all their sheep and cattle and they would have starved but for the arrival of fresh parties who joined them in their northward trek.

Harvest Time Among the Matabele

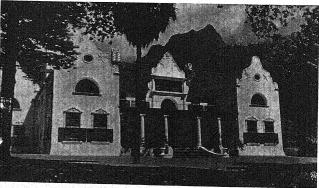
The Matabele, who are a branch of the Zulu race, found in Southern Rhodesia, are among the best known of the South African tribes. They are tall, fine-looking people and live in round huts, with doors only some two feet in height. Their diet consists of meat, corn meal, milk and a form of native beer which they drink in large quantities. They have several festivals during the year, the chief of



UNION OF SOUTH AFRICA GOVT. INFORMATION OFFICE

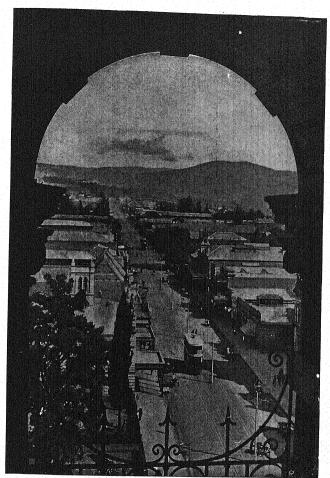
AMPHITHEATER AND UNION GOVERNMENT BUILDINGS AT PRETORIA

Built of native stone, the Union Government Buildings stand on the flank of a hill known as Meintje's Kop and overlook the administrative capital of the Union of South Africa.



THE PRIME MINISTER'S RESIDENCE THAT IS CALLED A BARN

The handsome building, so beautifully situated among the trees at the bottom of Devil's Peak, is Groote Schuur—Great Barn—the old Dutch-colonial-style home of Cecil Rhodes at Rondebosch, about five miles outside of Capetown. Today it is held in trust as the official summer residence of the premier of the Union of South Africa during sessions of Parliament.



PIETERMARITZBURG IN AN AMPHITHEATRE OF HILLS

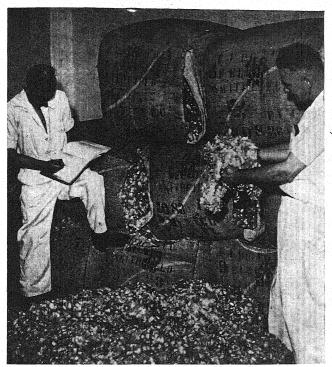
From the tower that surmounts the town hall we can here look down upon Pietermaritzburg and see the straight line of Church Street reaching away toward the surrounding hills. Pietermaritzburg, which has direct rail connections with the Transvaal, is the capital of Natal, a country of vast sugar and other plantations.



OVAMBO TRIBESMEN of South-West Africa weave the roof for one of their circular houses. Many of the natives are employed as tenant farmers to work the land of European owners.



FARMERS OF ZULULAND often have to transport their crops on crude, ox-drawn sleds. Only the land near the railroads and local markets can be used profitably for growing grain.



WOOL CLIPPED FROM SOUTH AFRICAN SHEEP AWAITS SHIPMENT

Sheep are the most important stock animals in the Union of South Africa, and wool is one of the country's most important exports. Most of the baled wool is shipped out of Port Elizabeth on Algoa Bay and East London at the Buffalo River. The mild climate of South Africa and the extensive grassy plateaus make the country suitable for grazing sheep and cattle.

which comes at harvest time. On the great day, when the harvest has been a good one, all collect in a vast square in the village of the tribal chief. There may be as many as two or three thousand warriors formed in a semicircle eight or nine deep, each man with his assagai, or spear, and shield. They then begin to chant a song, keeping time with their feet; occasionally they beat with their assagais on

their ox-hide shields, making a noise like thunder.

Now a man who has performed some great deed will spring out from among the warriors and execute a dance, thrusting with his assagai and otherwise showing how he would dispose of his enemies. Nearly all the warriors wear ostrich feathers stuck in their hair and have coats of the skins of different animals.



BLACK STAR

RICKSHAW BOYS WAITING FOR PASSENGERS, DURBAN

These two-wheeled, light vehicles, pulled by elaborately dressed young Zulus, prove fascinating to tourists in Durban. Located on the Bay of Natal just south of the Umgeni River, the city is one of South Africa's major seaports as well as a manufacturing and trading center. It is a popular seaside vacation resort with bathing facilities and sports grounds.



MONKMEYER

THE DEFT FINGERS OF A ZULU SCULPTOR WORK MAGIC IN CLAY

His young audience watches in rapt attention as the artist skillfully models his native villagers and spreads the completed pieces on a mat, where they will be dried by the sun.

The Bechuanas are another of the native races of South Africa and live in much the same way as the Matabele. They have the curious custom of adopting some animal as a sort of tribal mascot. Sometimes it is a crocodile, or it may be an antelope, a monkey or an elephant. Their dress is usually a cloak made from skins, and they are fond of ornaments in the shape of bracelets and anklets of beads, metal and the teeth of wild animals. For weapons they have assagais, small daggers and clubs called knobkerries, often beautifully carved.

The Bechuanas also are fond of dancing, and when several thousand of them perform together the scene is really splendid. Their marriage customs are similar to those of other South African tribes. The wife is acquired by purchase, her value varying according to her looks and her reputation as a housekeeper.

Rhodesia is named after Cecil Rhodes, a pioneer who in 1889 organized the British South African Company. It was also the land of Livingstone. We have pictured the country that he described, the waterfalls, which hamper water transportation, the herds of elephants, the rhinoceros and hippopotami in the rivers, and the lions lurking in the jungle. If

we go to Rhodesia today, however, we shall find that the elephants have largely disappeared, though lions are still to be found back in the bush. Rhodesia is a lofty tableland with a semi-tropical climate and beautiful scenery. It is rich in minerals, especially gold. On the Zambezi River, which flows through Rhodesia, are Victoria Falls, one of the world's mightiest falls and a favorite sight for visitors. The natives call the falls "the smoke that thunders."

Southwest of Rhodesia lies the Kalahari Desert, where there is little rain and the precious springs are few and far between. The Kalahari is not like the usual desert, for it has small trees and bushes and occasional herds of antelope. Its inhabitants are a dwarf race known as Bushmen and Hottentots; their language is one of clicks, made by peculiar movements of the tongue inside the mouth. Each click has a certain meaning. These little brown people wander from place to place without settled habitation, sleeping under rocks or in the shelter of trees and bushes, with a rough lean-to of brushwood. Even in the old days they had no flocks or herds and lived from hand to mouth, existing on the game of the country, which they shot with their bows



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THE UNIVERSITY OF CAPE TOWN IN A TRULY CLASSICAL SETTING

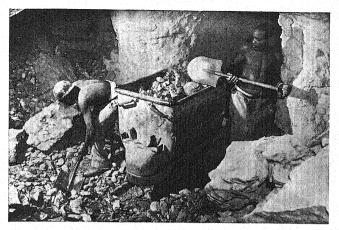
Devil's Peak (center) rises high above the buildings of the university. The grounds, in Rondesbosch outside Cape Town, were the gift of Cecil Rhodes, empire builder par excellence.



BLACK STAR

A BRIGHT DAY IN THE SUN AND SALT SPRAY AT DURBAN, NATAL

The broad beach on the Indian Ocean is close to the heart of the important city. Modern hotels stores and apartment buildings line a beautiful esplanade beyond the embankment.



DIAMOND MINING IN SOUTH AFRICA

These miners are loading the rock in which diamonds are found into one of the 38 cars they fill each day. Africa, with its large deposits, is the most important producer of gem diamonds.



PHOTOS, N. W. AYER AND SON IN

THE RESULT OF ONE DAY'S WORK

The diamonds shown are the "take" from the mines in one day—the work of many hundreds of men. The last bits of waste matter are sorted out by hand; only the diamonds are left.

bleak



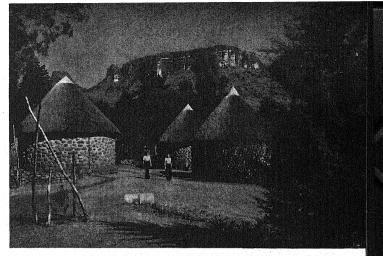
grasslands dot the SMALLER Their kraals, vil 4 ABOUT farmers. Their of the protected OF DOMED HUTS grain i ENCLOSURE violently herdsmen and South Africa CRESCENT of S ₹ ZULUS, much inhabited OF who once i coming of

and arrows. The bows they made from the branches of trees and the strings from the sinews of wild animals. For warfare they used arrows that were poisoned by being dipped in juice obtained from a plant or from a certain caterpillar. They still follow their old form of life, and when brought into touch with civilization they often pine away and die.

The Bushmen are especially interesting because their ancestors painted pictures of animals on rocks and in caves. These pictures are really amazing, considering that they were done by primitive men. They are finished with an accuracy that we cannot surpass today, and are still in a wonderful state of preservation. The Bushmen once occupied all South Africa from the Cape to the Zambezi, but they have gradually been driven before other and more powerful tribes, until now they inhabit only the Kalahari, Bechuanaland and Southwest Africa.

Living close to nature, they are wonderfully active and notice everything that is going on around them. They have a highly developed sense of direction and can find their way about on the darkest night. Though very small, they are incredible eaters. One man, it is said, will eat half a sheep at a sitting, and for him to dispose of forty to fifty bananas at a meal is nothing uncommon.

The Bushmen's homes are simple affairs. As the tribes are constantly on the move, their household goods consist of a few earthenware pots, spears and clubs for hunting and for use in warfare, ostrich eggs to carry water, tortoise-shells for holding food when in camp, and a few skins of wild animals to serve them as rugs and blankets. The Bushmen make excellent hunters; once an animal is wounded they follow it up until it is exhausted. Their powers of endurance are equal to those of the wild beasts, and they will run down a wounded antelope on the hottest day, keeping their quarry constantly on the move and allowing it no rest until it drops. A party of Bushnien once pursued a wounded giraffe for a distance of more than forty miles; then, when they had killed it, they went back the same



REST HUTS offer shelter to travelers in the Drakensberg Reserve, one of South Africa's playgrounds. The country has several sanctuaries for the surviving wild-animal life.



PHOTOS, UNION OF SOUTH AFRICA GOVERNMENT INFORMATION OFFICE

A CAVALCADE of adventure seekers rides up into the Drakensberg Mountains. The range along the western frontier of Natal ends in vast walls of rock over ten thousand feet high.

distance to bring up their families to indulge in the feast.

The Bushmen's knowledge of the habits of animals is probably unsurpassed. They seem to know exactly what an animal is going to do. They will watch a flight of bees high up in the skies where it is practically invisible to a white man. will follow it until they reach the tree where the bees have their combs and steal the honey.

The Bushmen have many quaint beliefs. They say that when one of their number dies his spirit goes on a long journey until it arrives at a place where others have gone before, and that when they meet they share the hunting-grounds together. To them the wind, the dust, storms, lightning and all things in Nature are associated with spirits and are regarded with considerable fear.

They also believe that men and women can, in another existence, change themselves into animals. They regard natural phenomena as living things, but they do not worship either the sun or the moon. They remark, however, that the sun retires to bed each night and gets up in the morning like a human being.

Huge Hats of the Herrero Women

Southwest Africa, which was German territory until the end of World War I, is inhabited by the Herreros, a pastoral tribe whose dress is especially remarkable. The women wear huge caps made of skins, which terminate in three points like horns and from each of which hangs an ornament. The weight of this headdress is often great, yet, despite the heat and the discomfort, no Herrero woman would dream of appearing without her hat. In addition to this she has heavy metal ornaments, and her arms are covered with bracelets or what appear to be pieces of metal piping.

The customs of the Herreros are often cruel; for instance, those who are suffering from some disease which is believed to be incurable are left in a hut in the jungle until death or some wild animal makes an end of them. Old people are treated in the same way.

Hero of a Famous Duel

In Natal we find the Zulus and the Swazis, whose manners and customs are somewhat similar, as the Swazis fell under the dominion of the newly constituted Zulu nation in the early nineteenth century. Before the Zulu War in 1870 this tribe was organized into regiments and constantly engaged in wars and warlike preparations. They lived in large villages of huts, as they do now, and waged war on all the neighboring tribes. establishing such a reputation for ferocity that no tribe could oppose them.

When a Zulu army returned from any expedition, the men were paraded before the chief, who directed them to bring out any who had shown fright in warfare. These unfortunates were instantly killed as an example to the others. Much of the influence that Great Britain afterward acquired over the Zulus was due to a British subject, Colonel Johann Colenbrander. who lived for years among them.

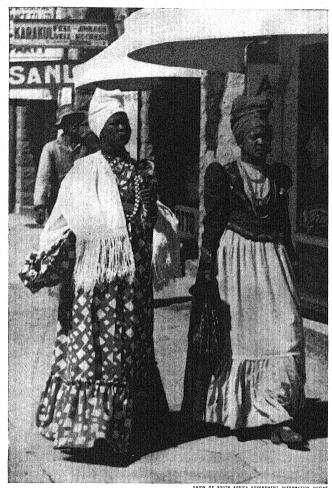
He is said to be the only white man who has ever killed a Zulu warrior in single combat. The great duel took place on uneven ground, and just at the beginning of it the white man's weapon was rendered useless by a blow from the Zulu's battle-ax. The latter also carried an assagai. But the white man closed with him and after a desperate struggle actually succeeded in lifting the Zulu in the air, working his spear around him and impaling him on the weapon.

Plantation Coolies from India

Many of the native inhabitants of South Africa are employed as servants or farm laborers or in the gold and diamond mines and factories. They regard this work as being only temporary, and when they have earned sufficient money to buy a wife or some land they give it up.

Until immigration from India was prohibited in 1911, thousands of Indians came to South Africa. Today, in the districts where tea is grown, many of their descendants work on the plantations.

Sugar-cane has been planted successfully in South Africa. Indeed, large



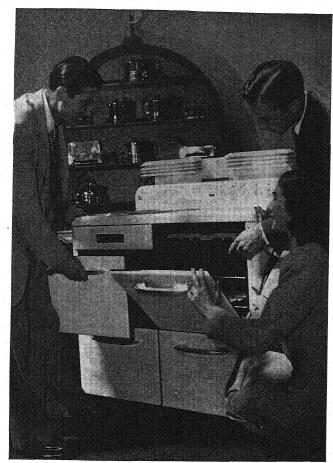
PICTURESQUE HERERO WOMEN on the streets of Windhoek, capital of South-West Africa. The proud Hereros, a wandering pastoral people, were once the ruling group in their region.



UNION OF SOUTH AFRICA, INFORMATION OFFICE

A YOUNG ZULU GIRL DISPLAYS HER MUSICAL SKILL

At an agricultural show in the Melmoth district of Natal, South Africa, a Zulu girl demonstrates a musical instrument that consists of one string and a bow. The Zulus are handsome and sturdy people. Once they were all-powerful in South Africa. The most important crop in this section is sugar-cane, and many Zulu families derive their living from it.



BLACK STAR

INDUSTRIALIZATION—THE ORDER OF THE DAY IN AFRICA

Visitors to Africa today are likely to find it very different from what they had anticipated. Vast areas are electrified and labor-saving devices that make for greater efficiency have been introduced. All types of home appliances are in use. The stove and the smaller mechanical items such as the percolators, toasters and grills above show the trend toward modernization.

areas are given over to sugar-growing. Here too we shall find Indian coolies extensively employed on the plantations; but if we go into a Natal sugar refinery we shall see "black boys" at work operating the machinery.

FROM CAPE TOWN TO THE ZAMBEZI: FACTS AND FIGURES

THE UNION OF SOUTH AFRICA

A sovereign state of the British Commonwealth, consisting of 4 provinces—Cape of Good Hope, Natal, Orange Free State and Transvaal is bounded on the north by South-West Africa. Bechuanaland and Southern Rhodesia, on the east by Mozambique, Swaziland and the Indian Ocean, on the south by the Indian Ocean and on the west by the Atlantic. Area, 472,494 square miles; population, 12,646,000. A Governor-General is assisted by an Executive Council (Cabinet) which is headed by a Prime Minister. Parliament consists of a 44-member Senate and a 153-member House of Assembly. Principal crops are corn (mealies), wheat, potatoes, to-bacco, tea, sugar and citrus fruits. Wool production is important. Industries include metal, food and chemical processing; construction; clothing-manufacture, and publishing. Mineral products include gold, diamonds, coal, copper. asbestos and manganese. Exports: wool, diamonds, base metals, fruits and nuts, coal, chemicals, footwear and beverages. Imports: food and drink, vehicles, textiles and machinery. Railways, 13,942 miles; roads, 25,000 miles; domestic and foreign air service; 415,518 telephones, and international radio-telephone connections. Christians predominate; there are Jews, Moslems and Hindus. There are a number of special schools; nearly 20,000 students in o universities, 2 are constituent colleges; 1,325,000 pupils in 9,110 primary and secondary schools. Population (European descent) of chief cities: Johannesburg, 332,000; Cape Town (legislative capital), 220,400; Pretoria (executive capital), 130,800; Durban, 130,200.

HIGH COMMISSION TERRITORIES

Basutoland, Bechuanaland and Swaziland are under executive and legislative control of a British High Commissioner. Supervision of each is vested in a Resident Commissioner.

each is vested in a Kesident Commissioner.

Bechmaidand Protectorate. Bounded west and north by South-West Africa, east by Southern Rhodesia and Transvaal, and south and southwest by Cape Province; area, 275,000 square miles; population, 289,000. Resident Commissioner is at Mafeking, Cape Province. Chief exports are livestock and hides. Public and ori-

vate schools, 170, and I teachers school.

Rasutoland Protectorate. Bounded on the

Basstoland Protectorate. Bounded on the west and north by Orange Free State, on the east by Natal and on the south by Cape Province; area, 11,716 square miles and population, 574,000. Leading exports are wool, mohair, sorghum, corn and wheat. Motor roads, 523 miles. There are 1,078 schools with 01,000 uppils enrolled. Resident Commissioner is at Meseru.

Sveaziland Protectorate. Bounded east by Mozambique and Natal and south, west and north by Transvaal; area, 6,705 square miles; population, 197,000. Resident Commissioner is at Mbabane. Chief exports are cattle, hides and skins, tobacco and butter. In 195 schools there are 13,800 pupils. Roads, 1,145 miles.

MOZAMBIOUE (Portuguese East Africa)

Bounded on the north by Tanganyika, on the east by the Indian Ocean, on the south by Natal and on the west by Swaziland, Transvaal, the Rhodesias and Nyasaland; area, 297,732 square miles, and population, 5,735,000. The Governor-General is assisted by a Council, made up of appointed and elected representatives of commercial classes. Chief products are sugar, corn, cotton, copra, sisal and minerals. Livestock, 1,107,000 head. Mineral deposits include gold, silver, samarskite, uranium and asbestos. Rail-ways, 1,651 miles; roads, 18,068 miles; telegraph lines, 7,807 miles; 5,257 miles of telephone lines. There are 161,175 pupils in 1,150 schools. Population of chief towns: Lourenço Marques (capital), 7,000; Beira, 3,0000.

MAURITIUS (British Colony and Dependencies)

Island and dependent groups in the Indian Ocean. Area of Mauritius, 720 square miles; population, 406,000; area of island dependencies—Rodrigues, Chagos (Oil) Islands, Agalega and St. Brandon Group—80 square miles; population, about 15,000. Under a Governor and Executive and Legislative councils. Leading exports are sugar, rum and aloe fibers. Railways, 116 miles; roads, 700 miles; telegraph lines, 281 miles; telephone lines, 7,118 miles. Hindus predominate; there are Roman Catholics and Protestants. There are 60,716 pupils in 170 schools as well as other primary schools and government colleges. Population of capital, Port Louis, 72,788.

FORMER MANDATED TERRITORY: FACTS AND FIGURES

SOUTH-WEST AFRICA

Bounded on the north by Angola and Northern Rhodesia, on the east by Bechuanaland, on the southeast and south by Cape Province and on the west by the Atlantic; area, 37,725 square miles and population, 430,000. Mandate, granted by League of Nations to Union of South Africa in 1920, has not yet been transferred to UN trus-

teeship. An Administrator, appointed by the Governor-General of the Union, is assisted by an Executive Committee and an 18-member Assembly. Leading exports are diamonds, lead-copper concentrates, zinc and vanadium. Rail-ways, 1,133 miles; 17,326 miles of telephone and telegraph circuits. There are 174 schools. Population of capital, Windhoek, 23,500.

MYSTERIOUS MADAGASCAR

Interesting Island Detached From Africa

Ages ago Madagascar became a vast island, after having been a part of the continent of Africa. To-day a sweep of ocean ten thousand feet deep and 290 miles or more in width, the Mozambique Channel, lies between them. Yet the island contains not alone fossil remains of the African hippopotamus, but it has become the home of tribes of African origin—together with some of Malay extraction. Just how this came about, scientists are not sure. Some volcanic convulsion must have occurred which tore this huge piece from the southeastern coast of the continental land mass. All tribes are now united under the flag of France.

ADAGASCAR is an oval island, the largest in the Indian Ocean, with a coastline of three thousand miles little indented, though there are harbors at Tamatave, Majunga, Suarez, Diego and Tulear. Some of these ports, Tamatave especially, have been known to Europeans for several hundred years, but the interior, which rises in a hump of mountainous country, is still a mystery. Around the island, with hardly a break, lies an almost impenetrable jungle forest from ten to forty miles deep. The coasts are marshy, and fully six-sevenths of Madagascar has tropic heat with a rainy season from November to April save on the east coast where, thanks to the vaporladen southeast trade winds, it rains throughout the year. There are terrific thunderstorms, and residents of the coast often see water-spouts and hurricanes. In the high interior there is, however, a cool season when the nights actually approach the freezing point. The mountains include hundreds of extinct volcanic cones and there are occasional slight earthquake shocks.

It is possible that this great land mass, which lies off the southeasterly portion of the African continent—in places but 240 miles removed from the mainland—may at one time have connected Africa and Asia. At any rate, it appears to have been torn from East Africa by some geological upheaval in remote times.

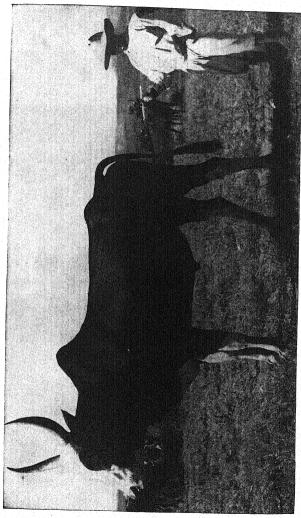
The language of the island is said to be derived from the ancient Malay, and the Hovas, the leading people, trace their origin from the Malays. There are also Sanskrit words in the language which were brought in by Buddhist missionaries from India. There are Arabic phrases, for Arab merchants traded with Madagascar at least a thousand years ago. Both these Arabs and the Indian traders formed settlements on the coasts. Finally, on the west side of the island there are tribes showing Negro blood who are evidently descended from African settlers; and in the western forests there are the remains of a people called the Vazimba, supposed to have been the original natives of the island who were driven inland by the Malay conquerors. Added to all these there are traces of Melanesians (people from the South Pacific) but how they came is not known.

There are, according to a late census, about 3,800,000 people in Madagascar. The Hovas of the central province of Imerina are the most important. The word "hovs" really means the middle class of the tribe, as distinguished from the nobles and the slaves, and the correct name of these people is Merina or people of Imerina. They do not resemble Negroes in any way: except for their dark skins they might be Europeans, though their eyes are dark brown, their hair jet black and straight. Like other tribes of the central districts, they have been Christianized by various missionary societies.

The Bétsiléos, who live south of the Hovas, are larger and darker colored and their hair is curly. In the southeast are found the Baras, who are much more primitive. These people wear their hair in knobs done up with wax or fat and whitenir g. The middle knob is the size of a croquet ball, the others smaller. Each



gascar. Much of the interior of the island is a high plateau that is broken in every direction by mountain ranges and volcanic masses. HUGE BOSSES, or knobs, of bare and rugged rock, deeply scarred with great fissures, rise steeply out of the Plain of Bétsiléo in western Mada-

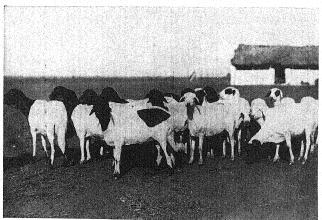


SEVERAL HUNDRED YEARS AGO some long-horned, humped cattle were brought to Madagascar from Africa. Today they are found in tre-

mendous herds and are responsible for a large part of the island's agricultural wealth. They furnish food and are also valuable draft animals,



IN SOUTHERN MADAGASCAR live the primitive people of the Antandroy tribe. Some Malagasies, like the Antandroys pictured here, clearly show a strong strain of African blood.

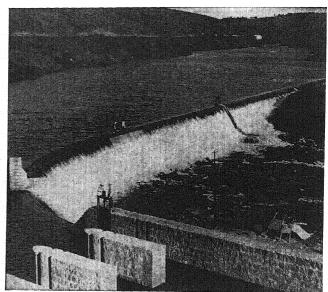


PHOTOS, FRENCH EMBASSY PRESS & INFORMATION DIVISIO

PIEBALD, FAT-TAILED SHEEP, like many other domestic animals found in Madagascar, are not native to the island but are the descendants of animals introduced from abroad.



ANDRIANAMPOINIMERINA rules here! The thatch-roofed and slab-walled palace of native king of Madagascar scarcely lives up to the splendor of the monarch's name.



RENCH EMBASSY-INFORMATION DIVISIO

WHITE WATER FOAMS OVER THE BARRAGE (DAM) D'ANTELAMITA

Madagascar has splendid water-power possibilities. There are a number of rivers which flow down from the watershed formed by the central highlands. On the east the drop is very rapid. Here streams rush through gorges in a succession of magnificent cascades. A beginning has been made, with such dams as this, to harness the potential power.

knob is quite hard and on some heads you may count as many as one hundred of them. The Baras wear great wooden earrings and around their necks necklaces hung with charms. They love brass nails, and have dozens of them fixed into the butts of their guns, cartridge boxes and powder flasks. The head of each nail is the size of a quarter.

Along the western side of the island there are no fewer than twenty-five tribes, including the Betsimisárakas, the Tanalas, and the Sakalavas, who, before the Hovas rose to power, were the rulers of the whole island.

The natives make rather superior houses, with walls of red clay or planks and high-pitched, thatched roofs with pro-

jecting eaves which are ornamented with quaint wooden figures reminiscent of those used elsewhere on totem poles. The women are clever at plaiting straw and make sleeping mats, as well as wide hats of palm-leaf, and clothing of grass, cotton or tree bark the fibers of which they separate by beating it with wooden mallets. Unfortunately some of the younge set conceive it to be the height of fashion to stain every alternate tooth black. The Malagasy folk eat quantities of rice, which they grow on irrigated land and cultivate with a narrow-bladed spade. The Sakalavas, however, live largely on cassava and sweet potatoes.

In the old days the natives used the blow-pipe—one more way in which they



FRENCH EMBASSY PRESS & INFO. DIV.

PUTTING SCIENTIFIC METHODS TO WORK IN THE RICE FIELDS

Malagasy workers are artificially crossbreeding rice strains in an effort to produce a hardier plant. Rice is the most important vegetable product grown for food in Madagascar.



EWING GALLOWAY

A RICKSHA MEANS QUICK TRANSPORTATION IN TANANARIVE
Residents of Tananarive use a ricksha-type vehicle to travel about the streets. Ricksha boys
can run at amazingly fast speeds while pulling and pushing the cart.

resembled the tribes of the Malay Archipelago. Today, though, most of the men have guns, usually modern rifles, besides being sufficiently good metal-workers to forge the iron found on the island into spears and arrowheads, farm implements and knives.

The people keep sheep and cattle. The cattle are like the Indian zebus with a big hump behind the neck. No one knows where they came from, for when the Portuguese first landed on the island, cattle were, even then, the principal riches of the inhabitants. Most of the sheep are of the fat-tailed breed—creatures with black heads and very little wool, whose tails make choice eating, from the native point of view.

Malagasies make dug-outs from single tree trunks for use on the rivers, while the coast-dwellers build large boats made of planks literally sewed together with palm fiber. Some of these are fitted with outriggers like those of the craft used by the South Sea Islanders. The coast tribes are good at catching fish with nets and traps.

Even though Madagascar may have been at one time joined to Africa, it was separated so long ago that the wild life is now quite different from that of the continent. Most of the wild creatures of Madagascar are small and not particularly dangerous. The worst is the foussa, a brown civet-like beast about twice the size of a cat, with a small head, short legs with strong claws and a long tail. It is nocturnal and sometimes carries off lambs and kids, and when wounded defends itself with such ferocity that the natives believe it will attack a man.

Lemurs, monkey-like creatures of which there are many different sorts, are plentiful, and they are found in few other countries. The most puzzling animal is the aye-aye, a nocturnal lemur, about as large as a cat, with big bare ears, eyes which can see in the dark, rat-like teeth with which it cuts into tree trunks in search of the insects on which it feeds, and the most amazing, spidery-looking hands. The third finger of the right hand is as thin as wire, for it is used in picking

MYSTERIOUS MADAGASCAR

out the grubs from the wood. It sleeps all day and feeds by night. Another queer animal is the tenree, a spiny creature which lives chiefly on earthworms. It sleeps through the hot weather and wakes when it becomes cool.

Remains dug up in swampy places prove that there existed in Madagascar a huge, wingless bird which has been named Æpyornis. It would have made the biggest ostrich look small, for it was fourteen feet high, and its eggs, of which many have been found, are six times the size of ostrich eggs. It is believed to have been living up to a few centuries ago.

No fewer than two hundred and thirtynine species of birds have been found. There are plovers, rails, herons and other familiar water-birds; also parrots, pigeons, crows, rollers, birds of prey and delightful little honey-eaters—creatures that look like humming-birds. The rivers hold two sorts of crocodile, of which one is peculiar to the island. Both grow to a great size and are dangerous to man and beast. A twenty-foot crocodile will pull an ox into the water and drown and eat it. There are also poisonous snakes and swarms of stinging insects.

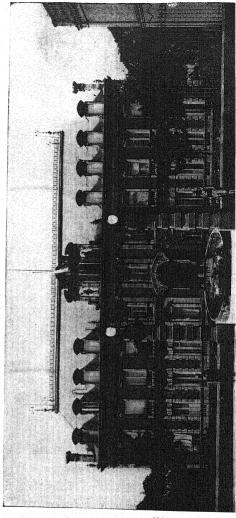
Madagascar, discovered in 1500 by the Portuguese, was for centuries an independent kingdom. The French established trading posts and began colonizing about 1700, and by the Anglo-French agreement of 1800 established a protectorate over the island, which six years later became a French colony. It was thought necessary to depose Queen Ranavalona III, who had succeeded to the throne in 1883, and eventually she was deported to Algiers. The French have, however, brought about such material improvements as the construction of railroads, the introduction of air service, the irrigation of dry lands and the conservation of valuable forest areas. date they have constructed almost sixteen thousand miles of roads suitable for motor traffic, a railroad between the capital city, Tananarive, and the chief port, Tamatave, and one southward from the capital to the thermal springs at Ant-

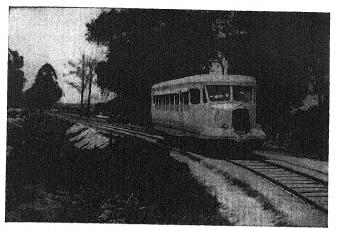


FRENCH EMBASSY-INFORMATION DIVISION

DIEGO-SUAREZ HARBOR, ONE OF THE BEST IN THE INDIAN OCEAN

Diego-Suarez is at the northern end of Madagascar, on a bay of the same name. It has been a naval base for many years. The present town was laid out by the World War I hero Marshal Joffre. A Portuguese explorer, Diogo Soares, gave his name to the bay in 1543. It is also known as British Sound; and one may still hear the native name of Antsirane used.





AN AUTORAIL CAR, A COMBINATION OF BUS AND TRAIN

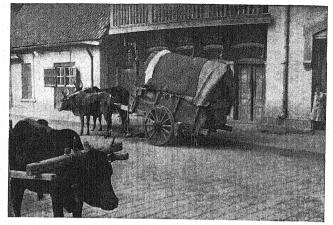
There are only a few hundred miles of railways in Madagascar but almost three times as many miles of autorails. They provide quick and pleasant transportation between towns.



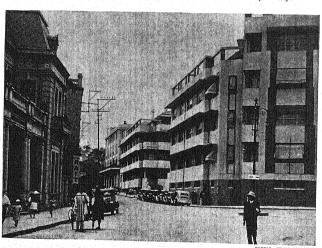
PHOTOS, FRENCH EMBASSY-INFORMATION DIVISION

A POST OFFICE WITH A TROPICAL LOOK IN TANANARIVE

The lattice work walls let breezes sweep through the building—a welcome feature in a hot climate. Overhangs help to shield the interior from the intense glare of direct sunlight.



A PRIMITIVE OX CART, its contents shielded against sun and rain by woven fiber mats, waits before a balconied house in an old section of Tananarive, the island's capital city.



FRENCH ADMINISTRATION has done much to improve Tananarive in recent years, and fine buildings, some of them modern apartments, now line the clean, well-ordered streets.

MYSTERIOUS MADAGASCAR

sirabe, besides two other lines, one running to the north of the island and one to the east coast. The motor bus service runs on a regular schedule along the main roads to the larger towns; and through the chain of lagoons on the east side a canal has been started which is adequate for small steamers. There is wireless communication with France, and French money is used. A Bank of Madagascar was established in 1925. The capital city is laid out with wide streets and other evidences of French influence.

From the steamy coastal plains rubber and vanilla are produced, and there were, by the latest statistics, some 1,400,000 acress sown to rice, the staple native food crop. While portions of the coast are desertlike, the great riches of the island are the coastal forests, which are full of such valuable timber as ebony, as well as gums and resins. But it will be many years before the forests can be extensively opened up, for the climate is deadly to white men. Cattle have been reared since the early days.

MADAGASCAR: FACTS AND FIGURES

THE COUNTRY

A large island in the Indian Ocean off the southeast coast of Africa, from which it is separated by the Mozambique Channel; the nearest distance between island and continent is 240 miles. Estimated area, 228,000 square miles; population is about 4,351,700.

GOVERNMENT

Administered as an overseas territory within the French Union. High Commissioner is assisted by a government council composed of the chiefs of the civil and military services and presidents of provincial assemblies, and a representative assembly of European and Madagascan members elected by the provincial assemblies.

COMMERCE AND INDUSTRIES

Cattle-breeding and agriculture are the chief occupations. Forests contain valuable woods as well as plants that yield rubber and resins, and dyeing, tanning and medicinal products. Leading crops are cassava, rice, corn, potatoes, coffee, haricot and French beans, sugar and tapioca. Livestock, 6/62,000 head. Industries include textile-weaving, metal-working and hat-making as well as meat-packing and other food-processing. Graphite is the principal mineral; mica, gold and precious stones are also produced. Exports: coffee, tinned meat, cattle and crocodile hides, vanilla and cloves. Leading imports are cotton cloth, machinery, petroleum products, metalware, autos, clothing, silk and rayon cloth and jute bags.

COMMUNICATIONS

Regular coastwise steamer service between principal ports. Railways, 534 miles; motorcar service of 1,375 route miles; all-weather roads, 6,000 miles; telegraph lines, 10,383 miles; telephone lines, 10,018 miles. Air service between main towns and to foreign points.

RELIGION AND EDUCATION

Catholic and Protestant missionaries have Christianized many native tribes; there is a considerable Moslem population. Education is compilerry, for Europeans between 6 and 14 years of age and for natives between 8 and 14; secondary and higher-grade schools are also provided. Enrollment of 199,143 in public and private schools. There are college faculties and public service, technical, vocational and agricultural institutes and colleges.

CHIEF TOWNS

Population: Tananarive (capital), 174,000; Majunga, 32,000; Tamatave, 29,000; Diégo-Suarez, 24,000.

ISLAND DEPENDENCIES

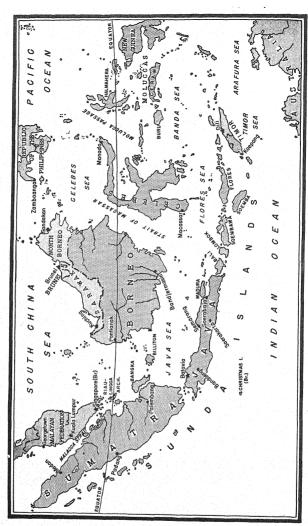
Nosy-Bé (area, 130 square miles) off the northwest coast, and Sainte-Marie (64 square miles) off the east coast, as well as Europa, Juan de Nova, Barren, Bassas da India and Glorieuses, all in surrounding waters, are governed by the High Commissioner. Other dependencies, far to the south and east, are Crozet Islands (181 square miles), Amsterdam, St. Paul and Kerguelen islands (2,405 square miles) and Terre-Adelie, south of Australia in Antarctica.

COMORO

An archipelago between Madagascar and Africa in the Mozambique Channel: area, 838 square miles, and population, 168,890. It is an overseas territory with representation in the French Parliament and the French Union Assembly. Production of sugar, once the chief product, has declined; vanilla and sisal are the chief exports. Dzaoudzi, on Mayotte, is the capital.

REUNION

An island, 420 miles east of Madagascar; area 970 square miles, and population is about 255,000. It is an overseas department, under a prefect and an elected council of 36 members, with 3 Deputies and 2 Senators in French Parliament. Chief products and exports are sugar and rum. Other products include manioc, tapica and vanilla. 33,557 pupils in lycée, primary and nursery schools; also a teachers' training course with 75 pupils. Roads, 400 miles; railways, 80 miles. Chief towns: Saint-Denis (capital), 36,096; Saint-Paul, 25,959.



THE FESTOON OF SCATTERED ISLANDS THAT LINKS AUSTRALASIA TO ASIA

THROUGH TROPIC FAIRYLANDS

The Malays of the East Indies

Java, Sumatra, Celebes—to mention but a few of the islands in that huge group that makes up the East Indies—what a fascination even these names hold! These islands possess all the glamour of the East—princes and palaces, ancient temples, dark forests, impenetrable jungles—and though Java has become one of the chief sugar, rice, order and rubber-producing centers of the world, large portions of the other islands of this group remain unexplored. Tons of sugar are annually produced and there are many sugar factories. Every year many thousand steamers and sailing vessels touch these shores. year many incommend steamers and saming vessels out these smooths most of the people are of Malayan stock, who are peace-abiding, but some of the tribes still remain unsubdued and comparatively unknown. This chapter deals with Java, Bali, Sumatra, Madura and Celebes as they were under their Dutch conquerors. Since the end of the second World War, the islands have broken away from the Netherlands to form the Republic of Indonesia.

HE isles known as the East Indies. between the Malay Peninsula and Australia, are really the highest peaks of a vast, partly submerged volcanic mountain range. They consist of Java and Madura, Sumatra, a part of Borneo (which is dealt with in two other chapters) and Celebes, together with innumerable smaller islands-Bali and Lombok, the Moluccas, the Riau-Lingga and the Timor archipelagoes, Bangka and Billiton. Their area totals somewhat over 735,000 square miles and their combined population is over 76,000,000.

Java, the most important of these possessions, is a land of tropical rains, moist heat and equatorial lack of seasonal change, which makes the islands a naturalist's paradise. There are over five hundred species of orchids alone, and their perfume becomes poignant with the falling of the dew, while the evening sounds with the chirp, squeak, buzz and bumble of myriads of insects, including such strange ones as a musical worm and a bird-killing beetle. In the sun-starved jungle tangled with lantanas and silent with deep moss-that endless jungle which clothes the slopes of the extinct volcanoes-tigers and other big game prowl, rhinoceroses wear paths up the mountains and reptiles add their odor to the horrors of the unknown wilderness at night. But in the gardens of the beautyloving natives and the luxurious European population, the tourist marvels at the sweetness of frangipani, the grace of pepper trees and the curiously twisted limbs of the gigantic figs that are planted for shade. Lotuses float upon the streams and ponds, and one finds vermilion fungi, tree-ferns, huge rasamalas (liquidambar trees), while the north coast of Java is fringed with mangroves.

Throughout Java, trees and shrubs grow to immense size, and the flowers and birds are of dazzling colors. More than four hundred bright-hued birds, including the peacock, are to be found in the islands. Indeed, some of the strange reptiles, insects, birds and flowers have not yet been given names. Botanists from all over the world come to Chibodas.

Many fruits grow plentifully. There are, for instance, over seven hundred varieties of bananas, ranging from little ones the size of a man's finger to those as long as his arm. The Javanese feed the big ones to their horses to make the animals have glossy coats. Mangoes, coconuts, pineapples and prickly pears thrive equally.

The majority of the islands belong to the Republic of Indonesia. Of these, Java, which lies in the track of most of the winds of the Pacific and the Indian oceans, contains about two-thirds of the entire population of the East Indies. Jakarta (formerly Batavia) is the capital city.

Though Java does not look large on the map, it is actually nearly four times the size of the Netherlands. The population consists mainly of Javanese, though there are many Europeans, chiefly Dutch, and a half-million Chinese, besides Arabs.



STANDARD OIL CO. (N. J.)

PATIENTLY WAITING FOR A NIBBLE BY A ROADSIDE IN SUMATRA

A net attached to the four prongs of the rod hangs like a basket below the surface of the water so any fish that wander in cannot easily escape. The waters of Sumatra abound in marine life. Shell-fish are found in the rocks along the coast, and ponds and rivers yield a variety of other edible fish.

This is a swamp between Soengei Gerong and Palembang.

Until the Malay inrush of the fifteenth century, the Hindus dominated the history of the island. The Portuguese came in 1520 and the Dutch toward the end of the sixteenth century, both in quest of the spice trade. The first Dutch settlement was that of a commercial company which for two centuries mishandled native affairs. In 1798 this company was broken up; and in 1816 the Dutch government took over the rule of Java, and wiser measures were put into effect. The Javanese did not yield to the Dutch without some trouble, however. The most serious outbreak in the early years of Dutch administration came in 1825. A native prince, Dipå Negårå, arose and he and his followers resisted Dutch rule for five years.

However, as the years went by, Dutch influence and power grew. They opened up previously unexplored regions and established great plantations where thousands of native workers were employed.

Between the two world wars, nevertheless, the Javanese began to show a desire for independence and their own government. When the Japanese occupied the island during the war, they fanned this desire into a vehement flame; and the Dutch returned in 1945 to find that the natives had established an Indonesian Republic. Fighting broke out between the Indonesians and the Dutch; and then there was an interval in which the Dutch seemed to be accepting the Republic as part of a proposed Netherlands Indonesian Union.

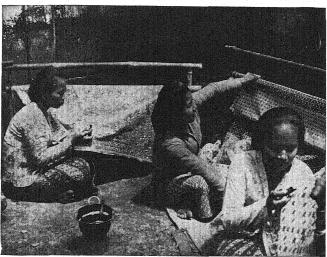
THROUGH TROPIC FAIRYLANDS

The United Nations intervened, but the conflict was not settled until late in 1949. Indonesia is now a republic.

Java is one of the most densely populated land masses in the world today. There are various reasons for this. For one thing, the land is immensely fertile, as we have seen. The fruits offered by nature and the cultivated products of the fields offer sustenance to an immense population. Timber trees, palm trees and bamboos provide ample building materials. Then, too, Java has a comparatively healthy climate. At times, indeed, the heat is excessive, but relief is often provided by brisk sea breezes. Though there are frequent thunderstorms near the high mountains, the island is not often subjected to storms which injure life or property.

The large plantations of Java are models of skillful planning and careful cultivation. Some of the land on which they are situated was once jungle, which had to be cleared away in order to make the soil available for agriculture. Even mountain slopes were leveled off for this same purpose. Today the well-drained mountainsides are covered with tea bushes, symmetrically laid out, and a model irrigation system has been planned for them. A variety of plants is grown, but the differing kinds of tea are due less to that fact than to the time and method of picking the leaves. The tea factories that are connected with the plantations are clean and airy buildings, in which modern machinery is employed.

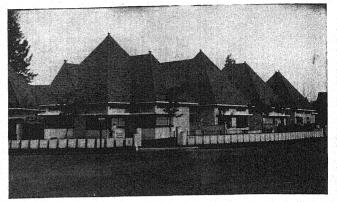
A network of splendid railways, which has been made by European engineers,



AVE UNIVERSE

JAVANESE WOMEN PRACTICE THE FINE ART OF MAKING BATIK

A pattern is first drawn on plain fabric, which may be linen. The pattern is then filled in with a waxlike liquid (the stage of the operation shown here). This is allowed to harden. When the material is dipped in dye, the wax repels the dye and only the background absorbs the color. Finally the entire fabric is boiled to remove the wax—and the result is batik.



A PLEASANT ROW OF HOUSES DESIGNED FOR HOT-CLIMATE LIVING

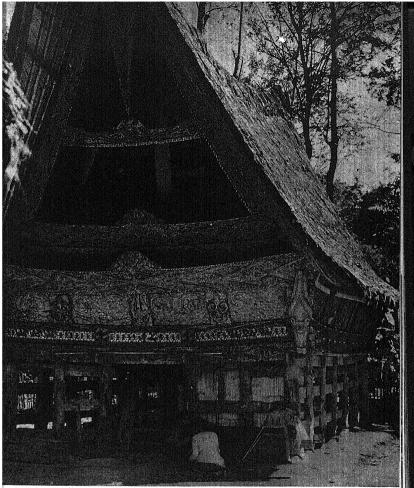
The dwellings are on Darmo Boulevard in Surabaya, Java. Wide windows let in air and steep roofs catch only slanting rays of the sun—cooling features for homes so near the equator.



PHOTOS INFORMATION OFFICE, REPUBLIC OF INDONESIA

THE SPICK-AND-SPAN RAILWAY STATION IN WELTEVREDEN

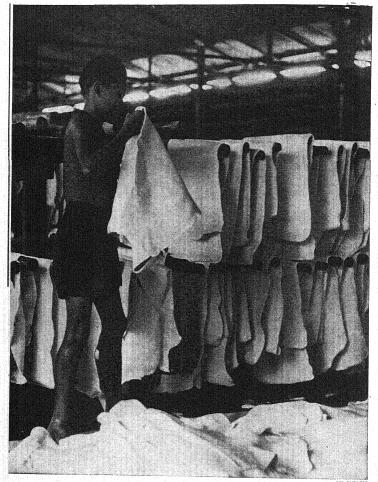
"Taxis" await the traveler—sados, or pony-drawn carts. Weltevreden is an attractive suburb of Jakarta (which the Dutch once called Batavia), the capital of the Indonesian Republic.



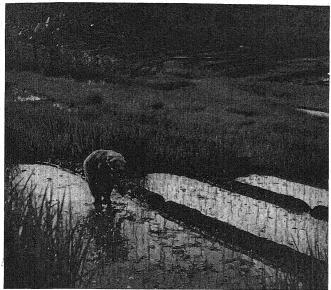
PHILIP GENDREAU

A BATAK HOME ON SUMATRA WITH AN ELABORATE PEAKED ROOF

The Bataks build their houses on stilts and enter them by small staircases. They are large, often housing up to eight families. The upper story may be closed by a slatted screen (left).



SHEETS OF RUBBER ARE HUNG UP TO DRY IN A SUMATRA FACTORY When the liquid latex has coagulated into spongy sheets, the sheets are washed between rollers to remove impurities. Then the sheets are placed on racks to be dried by the air.



STANDARD OIL CO. (N. J.)

A HARD-WORKING WOMAN OF JAVA

Rice is grown in Java at any time of the year, for there it is summer all year round. One field is harvested while the next is being sown; in another the paddy stands half grown, and in yet a fourth oxen wade knee-deep in watery mud, drawing wooden plows. This woman will be tired by night after her constant stoop to set out the young plants.

links up the plantations and towns. Wide roads, such as are seldom found in the East, make motoring delightful.

The natives, although small, are graceful, strong and well built. They are a branch of the Malay race and are intelligent and extremely polite. As the cultivated part of Java, which occupies more than one-third of the whole island, is covered with vast plantations of rice, coffee, sugar-cane, corn, cassava, sweet potatoes, groundnuts, soya beans, to-bacco and lesser crops such as the Pertuvian bark from which quinine is produced, the natives are nearly all agriculturists. They live in villages, or kampongs, and each village may contain from thirty to

five hundred inhabitants, who live happily and peacefully tilling the land. Some work for hire on large estates, but the largest percentage of Indonesian land is owned by the individual farmers themselves. Though production of the staples, rice and corn, is plentiful, the population has increased with such rapidity that Indonesians have had difficulty raising all the food they need.

The villages are often surrounded by groves of palms, which sometimes quite hide the low huts. The houses are built of teak or bamboo, with thatched roofs, so that the native has nothing to fear from earthquakes, which in these volcanic regions are frequent. If his house gets



INFORMATION OFFICE, REPUBLIC OF INDONESI

AGRICULTURAL STUDENTS IN JAKARTA REMOVING FISH FROM POND

Gadja Mada University at Jakarta, Java, has a fine agricultural college. These boys are students, working in rice fields that have been artificially flooded and stocked with carp. The fish fatten on the rice that drops into the water and so the fields are made to produce fish as well as grain.

The boys are removing the carp from a pond that has been drained.

shaken down he soon builds a new one. Often each hut has a flower garden in front of it, which adds considerably to its picturesque appearance. Sometimes there are Chinese coolies in the villages, too, but they live by themselves. The beat of a drum made of a hollow log marks the passing hours, or warns the folk in case of an alarm.

The house of the better class native is made up of three separate structures which are often joined by corridors. There is the "oman," which contains the quarters of the family; then comes the "pandopo," where guests are received; and lastly the "pringitan," in which are the guests' sleeping quarters. These houses have no windows and no chimneys, but this does not really inconvenience the owners, as the Javanese pass a great deal of their time out of doors.

The poorer people live in huts made of bamboo, wood and rushes bound together with rattans. In western Java the floor is built some distance above the ground, so that cattle can be stabled underneath.

One of the best characteristics of the Javanese is his extreme affection for his

family, which is generally a large one. The children have a happy time, as their fathers and mothers make much of them and seldom punish them. Little boys, with only a necklace for clothing, drive the tame buffaloes to their daily mud bath, or hunt for crickets, which they train to fight in imitation of their father's highly prized fighting cocks.

The Javanese marry at an early age, but only members of the rich or the upper classes have more than one wife. A wedding is an excuse for holding a feast and nearly everyone in the village gives some small gift of food. The dancing, feasting and merrymaking sometimes continue for days.

The chief food of the Javanese is rice, the cultivation of which is a laborious undertaking, though the climatic conditions are favorable. The people often work all day knee-deep in mud, which gives off evil gases and is the home of fierce insects. When they gather the harvest they are forced to work for days in a stooping position, cutting off the ears by hand one by one, for such an implement as a scythe is unknown.



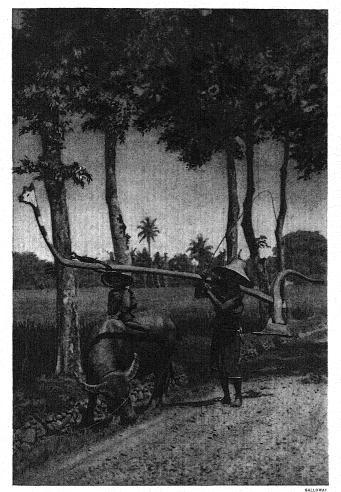
STANDARD OIL CO. (N. J.)

WEAVING WHILE YOU WAIT

On her hand-fashioned loom, a native of Palembang, Sumatra, weaves a rattan mat. Palembang is the second largest city of Sumatra and is important as the port from which petroleum is exported. The Pladju refineries are close by. Palembang produces some native-grown rubber, and coal is mined near by. The city, with its own airport, can be reached by air, sea or rail.



A SULTAN OF GOWA, at the southern tip of the four-fingured island of Celebes, wears a semi-European dress and has a retinue of but three body-guards. Of these, one shelters him beneath a pyong or state umbrella, the number of rings on which indicates the rank of the official. The retainer in epaulettes could defend him with the sword if need be.



A CARABAO, or water buffalo, quietly nibbles some grass along an Indonesian roadside. The animal carries a boy whose father carries a long, unwieldy plow—a curiously carved and painted affair. A furious beast when aroused, the carabao is, however, easily tamed and makes a docile draft animal. It is the Oriental farmer's most prized possession.

The Javanese love hunting and fishing. Sometimes a hunter may be so fortunate as to kill a tiger, for which he will receive a government bounty. He may sell the skin, but first of all he will pull out the teeth, claws and whiskers, which are considered to be powerful aids against evil spirits.

Some tigers may not be killed, because the people believe them to be friends who watch over their interests and frighten away other tigers. They think that the spirit of an ancestor resides in such a tiger. Wild pigs and deer are often to be seen; reptiles, including crocodiles, infest the swamps; and edible fish swarm in the rivers and coastal waters. With these sources of food at their disposal, the Javanese need not work hard to obtain a living, although they are gradually learning scientific methods.

Modern Industry Develops

While the chief occupations of the people on this enormously fertile island are in agriculture, industries spurted ahead during the ten years before the Japanese occupation. These included shipbuilding, automobile assembly, tires, glass and chemicals.

Most of the Javanese are Mohammedans. Among the many languages spoken in Indonesia, Javanese, Sundanese and Madurese are the most important. Malay is understood almost everywhere.

Jakarta, formerly Batavia, is the most important city in the East Indies. It is situated in one of the biggest sugar, rice and rubber-producing centers of the world. Part of the city, with its white stucco houses roofed with red tile, is quite modern. Thousands of miles of excellent railways run to all parts of the island, and a telegraph system has been in use since 1858. Indonesian has become the language of instruction in the schools, and Dutch-speaking professors at the university in Jakarta were given five years in which to learn Indonesian.

A Harbor Scented with Spices

Before Jakarta with its nearby port of Tandjong Priok is reached, we can

smell the almost overpowering scent of spices that is wafted from the island. A train takes us from the harbor to the best part of the town, where there are good hotels, telephones and other modern comforts. Fine houses and offices, built in the Dutch style, are to be seen. There are well laid out squares and gardens, and wide roads, where Europeans in white, and Chinese, Malays and Javanesee in their colored costumes add to the scene.

Many of the Javanese women living in the larger towns wear European dress, as do some of the men. The usual garment of the women, however, is the sarong—a wide piece of cloth fastened under the armpits and reaching nearly to the ground. When in public they also wear a short coat, with a scarf draped over the shoulders or tied around the waist. The women fasten their hair in a tight knot with pins; the men wear little turbans. Rings and bracelets are worn by both men and women, and the children frequently have anklets.

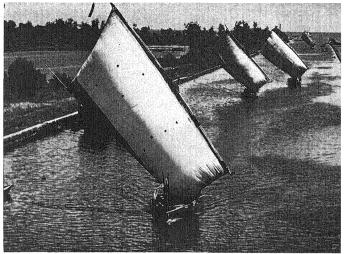
The old Dutch buildings, some of which were built in the seventeenth century, are well worth seeing. The city church is over two hundred years old, and has a fine pulpit and carvings. The imposing town hall dates from 1710. The Java Bank is housed in a fine modern building. A wide canal runs through the principal street and in it the Javanese bathe night and morning.

The city of Jakarta is actually divided into two parts. The new, modern part is a garden suburb known as Weltevreden. The tourist is delighted to find that it is one vast park checked off in mammoth public squares and gardens, fragrant with the perfume of orchids.

Old Section of the City

This portion of the city was known as old Batavia, famous for its sidewalk bazaars. Tourists enjoy the native banquets where rice is served with curry, chicken, peppers, fried fish and fried bananas, followed by wonderful coffee.

By the Tiger Canal live some thirty thousand Chinese—shopkeepers, hawkers and laborers—and here the buildings



TANDARD OIL CO. (N. J.)

OUTDOOR SPORT NEAR JAKARTA

It is all smooth sailing on the canals that connect Jakarta, Java's chief city, with the sea. The older part of the town is built on low, flat ground. The newer part—Batavia Centrum—is on higher land and is a beautiful, modern city. Near by is a fine harbor and an important airfield. Batavia Centrum used to be called Weltevreden, which is Dutch for "well satisfied."

and bazaars are Chinese joss houses, or temples, with their idols.

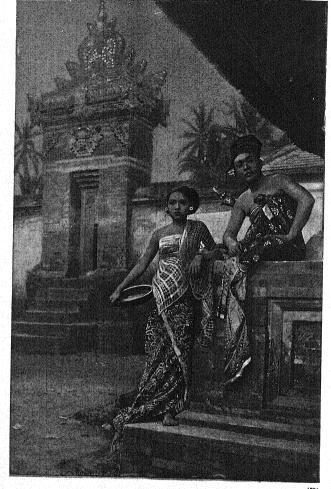
Semarang and Surabaya (Soerabaya) are also large towns. Surabaya is linked up east and west by good railways, and was the headquarters of the Dutch military authorities before World War II. Here are half-ruined fortifications which were built years ago by the Dutch.

Up until the early years of the twentieth century two strange states, called Jokja and Solo—short for Djokjakarta and Soerakarta—still existed in the center of Java. They were governed by a sultan and king respectively, and the old medieval forms of courtesy and court etiquette were still practiced. The tiny states seemed like kingdoms out of a fairy tale, complete with airy palaces and court nobles decked in gorgeous uniforms. There one could step into the long ago.

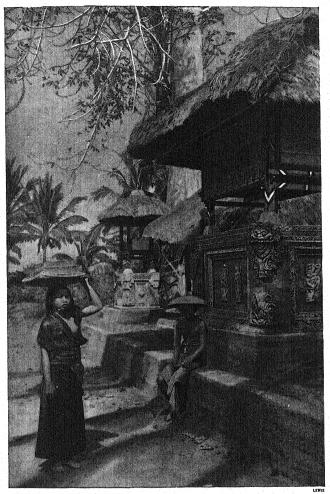
However, the king and sultan were rulers more in name than in reality. While their states still existed, they had to obey Dutch officials.

At Jokja there are over a thousand temples, and strangely carved ruins add to the general picturesqueness. Here the chief industry is the weaving and dyeing of the beautiful cloth that is famous in Java. The cloth is woven without a loom and the wonderful patterns are tediously made by dyeing the cloth after the patterns have been covered with a wax that keeps out the dye. The work is known as "batik."

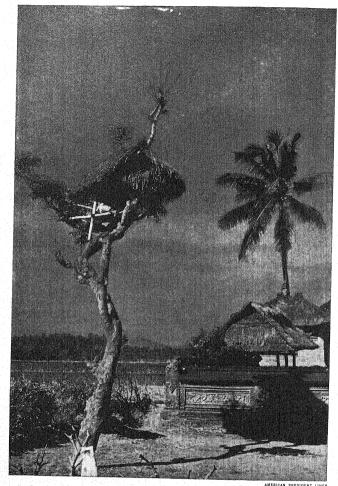
At Boro Budur, in the center of the island, are marvelous ruins dating back to the ninth century—relics of an ancient Hindu-Buddhist civilization that existed before the Arabs swept through the land in the fifteenth century. The ruins cover a small hill and are pyramidal in shape, mounting up the hillside in a series of terraces. There are five terraces and on them are the carvings that have made



THEIR TRAILING SARONGS, no less than their good features, show that these two young people of Bali are of high caste and that they are the aristocrats of their island. They live luxuriously in their richly decorated dwelling, waited upon by large retinues. The Balinese are of the same race as the Javanese, but they are of finer physique and taller.



ON BALL, a mountainous and volcanic island of the Sunda group, in the tail of the Malay Archipelago, rice is the leading crop. The grain is stored in thatched and painted wooden paddy-holders which stand by the roadsides. The one above rests on a pedestal of basalt, a volcanic rock of which the island is chiefly composed. The woman has a basket of rice.



CROP INSURANCE-A VIGILANT WATCHER KEEPS GUARD IN A TREE

So important are their crops to the Balinese that they take no chances on losing any part of them. From his vantage point atop a tall tree, a crop watcher keeps a sharp lookout. 240



SELF-SERVICE IN SUMATRA WHERE "PINCHING THE FRUIT" IS PERMITTED Indonesian women shop for food at the passar (market) in Soengei Gerong, Sumatra. To leave her hands free, the young mother carries her plump baby in a sling, which looks comfortable.



IN THE PADDY FIELDS there is always work to be done—ploughing, sowing, planting out and reaping. This Javanese woman has come to that last stage in the year's work, and her labor is more exacting than the harvesting of more civilized people, for she has to cut every stem separately with her knife. Now she is carrying the sheaves home for storage.



BY A TEMPLE, time-worn and overgrown with moss and lichen, two men of Bali talk together, but not as equal to equal. He of the trailing sarong is a high-caste Hindu (Brahman); the other, of a lower caste. Hinduism spread throughout Indonesia in the early centuries of the Christian Era, but remained strong only in Bali. Most Indonesians are Mohammedans.



BALINESE DANCER-SMILING MASK AND LONG FINGERNAILS

The dance in Bali usually depicts some phase in the life of a native god. Like most Oriental dancing, it consists mainly of sinuous hand and arm movements, with very little foot movement.

THROUGH TROPIC FAIRYLANDS

Boro Budur so famous. It has been estimated that there are three miles of carvings. The building of the temple must have been an even more stupendous task than the erection of the Great Pyramid

in Egypt.

To the east of Java is a chain of islands, of which each one possesses strange and wonderful scenery. The largest and most important is the volcanic island of Bali, which is peopled by natives similar to those of Java, but bigger, stronger and more primitive. Here the natives, who are Hindus, not Mohammedans, are more religious, especially the women and children, who spend a great deal of their time praying and making offerings of spice, scent and flowers at the little temple courts seen all over the island.

Brass Drums and Fighting-cocks

It is a wonderful sight to see the women going to the temple with baskets of flowers balanced on their heads. Everything is peaceful, save when the brass drums resound. The men, in elaborate attire with flowers in their hair, bear their fighting-cocks against their

chests or in ornate gold cages.

The villages of Bali, unlike those of Java, are enclosed by long, low mud walls, inside which the children play happily all day long. In the south are beautiful rice fields which rise up the hillsides in terraces. These terraces are very beautiful in Java, but in Bali they are even more wonderful. Among the most interesting sights to be seen in the island are the graceful dances performed by the young girls. The dancers are dressed like little goddesses and go through many elaborate poses, doubtless depicting the story of some Hindu god.

Bali is separated by a narrow but deep channel from the neighboring island of Lombok, yet the animal and vegetable life of the two islands is entirely different. The wild life of Bali is like that of Asia, but Lombok, with its marsupials and white cockatoos, resembles Australia. It really seems that the narrow channel between these two islands definitely divides one

continent from the other.

A Vast Unexplored Region

Sumatra, astride the equator, is three times as large as Java and thirteen times the size of the Netherlands, but it is composed largely of unexplored jungles. The civilization of this island is probably of Hindu origin. There are Sanskrit words in the various native languages. And as in Java, the Mohammedans, then the Dutch came and their sovereignty was gradually but surely extended. The British acquired a foothold in Sumatra in 1685, but vacated in accordance with a treaty signed in 1824.

A vast range of mountains called the Barisans runs down its entire length like a spine. Although there are many rivers, those that flow west are too short for navigation. Huge lakes and swamps, containing crocodiles and crabs; dangerous and unexplored jungles inhabited by tigers and savages, all combine to make

Sumatra a mysterious land.

The climate is similar to that of Java, but hotter. The inhabitants are a varied mixture of Malays, Hindus, Arabs and Chinese. The Malays include the Bataks, the Achinese and the Menangkabus. The Bataks are an interesting people—small but strong. They have known how to write since prehistoric days and their ancient books have pages of tree bark inscribed in brilliant ink. The Menangkabus are pure Malay. They live in the mountain regions of Padang which is believed by many to be the original seat of Malay stock. The Menangkabus must not be confused with the Orang-Kubus, a savage people who shun all contact,

With the exception of the Bataks, who are Christian, the inhabitants of Sumatra-are mainly Mohammedans. Owing to the mixture of Arab blood, they are inclined to be stricter in their religious observances than the Javanese. Some make the long journey to Mecca, and on their return they are greatly honored by their

friends and relatives.

Medan and the Rubber Plantations

Padang, the capital, is the chief town. Here we may see the results of European



A FAIR MAID OF BALI. Her dress and the tapestries behind her are from the looms of the island's skillful weavers. Like Bali itself, her costume is bright and highly ornate. In her hair are jewels in the form of tropical blossoms, and her earnings are heavy, golden whorls. As a mark of her high social standing, the nails of her left hand are uncut.



A CONSIDERABLE PERSONAGE, this Balinese chieftain displays both his wealth and his rank upon his person. Over his right shoulder we can see the jeweled hilt of his kris, a Malayan dagger that he wears in the back of his sash. The cultivated Balinese, like the Javanese, are an innately æsthetic people and delight in the vivid hues of the tropics.



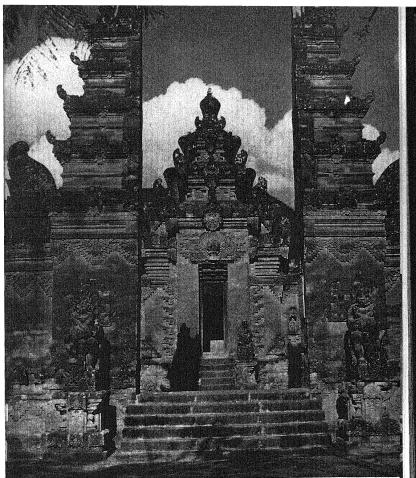
VILLAGE ON STILTS, CELEBES

Celebes has an amazingly long coastline in comparison with its area, and much of its land is near the water. The equator passes through the island, the climate is torrid and the tropical vegetation is generally dense. Yet the islanders have learned how to take advantage of the sea and river breezes by building their towns near—or even in—the water.



"THE PLOWMAN HOMEWARD PLODS HIS WEARY WAY"

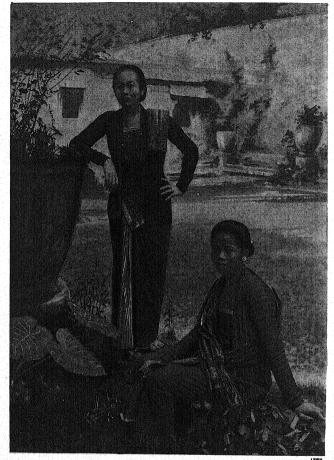
A villager of Gowa returns home from his fields in the early evening with his helpers—children and buffaloes. Coffee, indigo, cacao, sugar cane, the manioc root and tobacco are some of the crops raised in the rich soil of Celebes. Bamboo stems furnish material for housing, furniture, piping and utensils; and the leaves make good thatch for the roots.



AMERICAN PRESIDENT LINES

INTRICATE STONE SCULPTURE ON A BALINESE TEMPLE

The pura (temple) in Bali consists of three enclosed courts, the inner one containing the actual temple building. Most Balinese are Hindus, and the temples are dedicated to the god Siva.



THE JAVANESE, with their expressive features, their punctilious courtesy and high intelligence, are termed "the flowers of the Malay race." For when, in the late fifteenth century, Mohammedanism became the religion of all the East India Islands except Bali and Lombok, it superseded a Hindu-Buddhist culture of unknown antiquity. That the older civilization was one more highly developed than that which followed is pretty well proven by the character of the ruins of temples, tombs and cities that lie buried in the jungle.



A DANCER OF BALI, just over ten years old, pauses—unmoving, delicate, graceful, under her towering headdress. She looks much like the statue of a Hindu goddess. Her costume is of gold-brocaded silk, and her collar, girdle, bracelets, rings and armlets are of gilded metal set with jewels. When she dances her whole being—from wide, expressive eyes to quick, sure feet—comes alive in uncanny harmony with the music of an orchestra that the Balinese call a gamelan. Balinese dancers start training almost from babyhood.



STANDARD OIL CO. (N. J.)

KAPOK MILL IN SUMATRA

This kapok mill near Palembang, Sumatra, was built by the Japanese when they occupied the island during World War II. After the war Sumatra joined other territory formerly under Dutch rule to form the Republic of Indonesia.

occupation, though most of the island is still undeveloped. Medan is a new town, with cool, white buildings, and is surrounded by plantations where one finds the native Achinese and also numerous bands of Chinese coolies.

The rubber plantations are interesting. The rubber is procured from a beautiful tree, with strong, shiny leaves, and the trees stand in rows in gloomy forests where the sun can hardly penetrate. When the latex, or sap, is rising the trunks are notched, and cups are hung

around the trunks in order to catch the thick, milky juice that oozes out. This is poured into cans and taken away to be prepared.

South of Achin, the northern part of Sumatra, live other Malay tribes, such as the Bataks, Korinchis and Jambis. The Bataks consist of six tribes who speak two different dialects. They are governed by hereditary chiefs who took over after their magician-king Singa Maharadja was killed in the hostilities against the Dutch in 1907. They have their own script and the upper classes can read and write. Much of their writing deals with magic and astrology. They are an agricultural people and, unlike many tribes, make use of the plow. Their main crop is rice. They also raise cattle and horses, and are skilled workers in metal. In spite of their relatively high degree of culture, there were some remnants of human sacrifice until the early twentieth century. However, many of their people are being gradually converted to Mohammedanism and Christianity.

The houses of the Bataks are built on poles. They have high roofs, and sometimes there are snakes carved above them to guard the owners. Little wooden staircases serve as

entrances. The buildings are quite big, and often as many as eight families live together. One fire, which is never allowed to go out, is used for cooking by all of them, but each family has its own room.

The men and women wear cloth dyed with the indigo plant, and their fingers are always stained with this dye. Dogs and pigs run about in this village and act as scavengers. The pigs especially show that the people are not Mohammedans, as these animals are considered unclean by

THROUGH TROPIC FAIRYLANDS

the members of that religion. Here, as in Java and other parts of Sumatra, the people are fond of dancing and give numerous displays. Nearly all the Bataks, as well as most of the other peoples of Sumatra, are farmers. The harrowing and plowing are done by buffaloes, who seem to understand the work. They pull the harrow between the young rice plants and never trample even one underfoot.

Little bamboo houses on poles may be seen under a palm or a banana grove near the fields. From these shelters, lines, to which black tassels or bits of tin are attached, are stretched over the fields. The children manipulate the lines from the little lookout huts and so keep the beautiful but destructive paddy-bird away from their father's rice fields.

One of the four large Sunda Islands is Celebes, which is separated from the island of Borneo by the famous Strait of Macassar. Its outline is irregular and

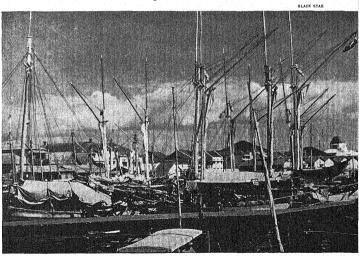
it looks somewhat like a starfish with an arm torn off the side that corresponds to the west coast of the island.

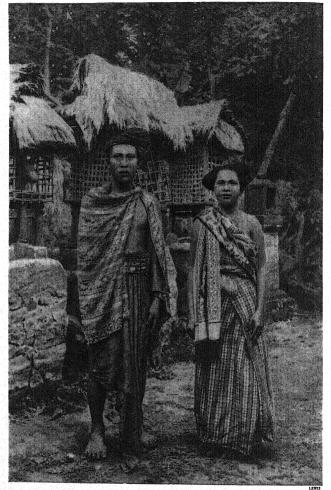
Here, perhaps, the scenery of the East Indies is to be seen at its best. Gorges and precipices abound in the south, and, when the walls of these project, a wonderful mass of vegetation, starred with gorgeous flowers, hangs down like a natural curtain. Most of the country is covered with almost impenetrable forests, which we can cross only by the hardly noticeable paths leading to tiny villages.

A curious feature about Celebes is that it possesses animals and birds which are not found on any of the other islands. Only one hundred and sixty kinds of birds are found, but ninety of these do not exist anywhere else in the East Indies. The animals also are peculiar to the island, and even several species of its butterflies are unique.

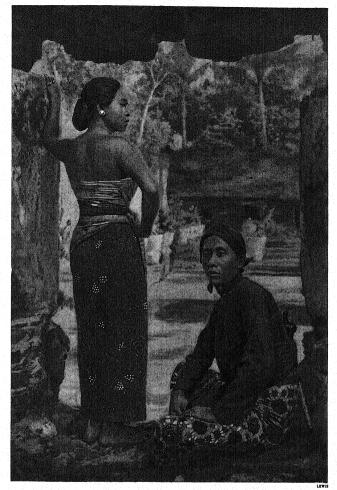
Around the coast the natives dive for

SMALL TRADING BOATS pack the harbor of Macassar, a bustling port on the island of Celebes. The city has been an important center of trade with Europe for hundreds of years.





FHE VILLAGERS of Bali display the same love of gorgeous color as the high-caste Balines of that brilliant, jungle-forested land. Caste is a very real thing in Bali, which has retained the older religion of the Hindus; though in Java, from which the island is separated by only a narrow strait, the people are Mohammedans and caste as such is disregarded.



THIS JAVANESE COUPLE from the east end of the island is typical of the East Indian branch of the Malay race, an amiable, agricultural people, unlike the indolent natives of Malaya in their capacity for hard work. They are extremely polite. The woman wears the native "sarong" and a sash; the man has a jacket as well and a strip of cloth worn turbanwise.

pearls and catch turtles for a living, but the products which come from the forests are the most important. The three principal Malayan tribes are the Macassars, the Mandars and the Bugis. The Macassars are fine men, well built and strong, and they love running, wrestling and hunting.

To the east of Celebes is that archipelago known as the Moluccas, which contains several large islands. There are Malay settlements around the coast of one of them, Buru, but the interior, which is largely dense forest, is peopled by strange tribes. These, though they are possibly of Papuan origin, are a yellowish-brown in color, of slight build and usually below medium height. They live in scattered communities and are almost untouched by civilization. Ceram, to the east of Buru, is a larger and more densely popu-

lated island, with Malay tribes on the coast, and the Alfoories (Alfuries), a far less civilized people, farther inland.

The end of World War II and the Japanese occupation did not mean the end of strife. To enlist the support of the Indonesians, the Japanese had encouraged the desire of the natives for self-government and fanned their resentment of the Dutch. The result was that when the Dutch returned to the islands after the war, they found a powerful group of Indonesians already setting up a Republic of Indonesia, including Java, Sumatra and Madura. Fighting broke out between the Indonesians and the Dutch, which continued off and on into 1949. On December 27, 1949, Indonesia (a republic since August 1950) received full independence; Irian (Western New Guinea) was still claimed by the Netherlands.

INDONESIA: FACTS AND FIGURES

THE COUNTRY

A group of islands in the Malay Archipelago lying along the equator between the North Pacific Ocean and the Indian Ocean. The total area is approximately 73,5,268 square miles and the population 78,000,000. (This includes Indonesian Borneo; for Borneo Facts and

Figures, see page 270.)
Area and population (estimate) of principal groups of islands are: Java and Madura, 50,594 square miles, population, 4,164,000; Sumatra, 103,557 square miles, 12,000,000; Riouw and Lingga Archipelagos, 3,121 square miles, 107,700; Bangka, 4,611 square miles, 205,400; Billiton, 1,806 square miles, 73,400; Celebes, 60,277 square miles, 3,781,500; Bali and Lombok, 4,069 square miles, 1,776,200; Molucca Islands, 33,315 square miles, 1,776,200; Molucca Islands, 33,315 square miles, 526,000; Western New Guinea (also claimed by Indonesia), 159,375 square miles, 345,700; Timor Archipelago, 24,449 square miles, 345,700; Timor Archipelago, 24,449 square miles,

1,657,400. GOVERNMENT

A governor general represented the Netherlands in the East Indies until the United States of Indonesia received full independence in 1949. Indonesia became a republic in August 1950, and has a president, vice-president, Cabinet and a one-house legislature. The Republic is a single state with ten provinces.

COMMERCE AND INDUSTRIES

Agriculture constitutes the chief occupation of the bulk of the population, with large plantations being operated by foreign interests, as well as many, many small Indonesian farms. The chief products are: sugar, rubber, coffee,

tea, rice, corn, cassava, tobacco, pepper, copra, kapok and cinchona (from which quinine is obtained). Fisheries are of considerable importance, and fish is an important part of the Indonesian diet. Native industries include the preparation of agricultural and forest products for export, weaving, dyeing and metal work. Tin is mined in Bangka, Billiton, Riau and Sumatra; coal in Borneo and Sumatra; petroleum found in Borneo, Sumatra and Java.

COMMUNICATIONS

Naturally there is considerable communication by water. Railway mileage, 4,611; road mileage, 43,700. Government owned telegraph, 4,523 miles; telephone, 16,921 miles; 129 radio stations. Air service.

RELIGION AND EDUCATION

Entire religious liberty; Protestant and Catholic missions; bulk of natives Mohammedans. Public and private elementary schools for Europeans, Chinese and natives; instruction in Indonesian and various dialects. There are about 27,500 elementary schools with around 5,500,000 pupils. There are professional, trade and technical training schools.

CHIEF TOWNS

Jakarta (formerly Batavia), capital, Java, 2-800,000; Surabaya (Soerabaja), Java, 800,000; Bandung, Java, 750,000; Jogjakarta (Diokjakarta), Java, 500,000; Solo (Surakarta), Java, 500,000; Solo (Surakarta), Java, 500,000; Palembang, Sumatra, 350,000; Padang, Sumatra, 350,000; Padang, Sumatra, 350,000

BORNEO THE ISLE OF SUMMER

Its Forest Folk and the Dayaks

To the extent that civilization demands a supply of rubber, every rubber-producing country is of interest. Borneo is one such country, It is a land of tropical jungle in which the mammoth orangutan and the gibbon, the python and the crocodile abound. Until comparatively recent times, Borneo was regarded as the home of the "wild men"—the head-hunting Dayaks. However, under the rule of the British (and of the Dutch, while they retained control of part of the island), piracy and head-hunting practically came to an end. This was tropical area, which was under Japanese military occupation during World War II, has large sections that are still unexplored.

BORNEO is one of the two or three largest islands in the world. A part of the Malay Archipelago, it lies north of Java in the China Sea. As it rests on a submarine plateau, its coastal waters are not deep and there are few neighboring small islands, though Banguey and Labuan lie off the northwest coast and the Karimatas off the southwest.

The mainland rises in a hump of huge mountains densely forested, with some sixty kinds of timber which is extremely valuable but for the most part almost hopelessly inaccessible. Ferns, vines and exotic wild flowers add to the impenetrability of a jungle nourished by tropic warmth and bounteous rainfall. In Sarawak, in northwest Borneo, which is hemmed between the mountains and the sea, there is all of two hundred inches of rainfall per year, the heaviest of it during the northwest monsoon which blows from October to March, though there are thunderstorms and sometimes torrential downpours even during the southwest monsoon which controls the climate the rest of the year.

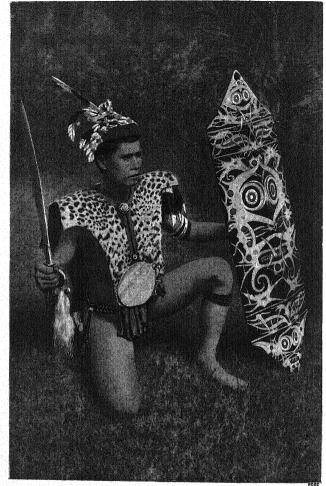
Vivid sunshine gives way to sudden wind squalls followed immediately by violent cloudbursts, while the rivers come cascading from the mountains till they can widen between wooded banks heavy with the pungency of rich black soil and wet foliage, or they become swirling rapids till at last they reach the fertile clearings of the plantations and the mangrove swamps of the coast. In other parts of Borneo the rainfall, though perhaps

only half as abundant, still averages a hundred inches a year. As the equator passes through the island, there are no seasons. On the coastal swamps and plains it is always hot; at Sarawak it ranges from 70 to 90 degrees by day, but is cooler at night.

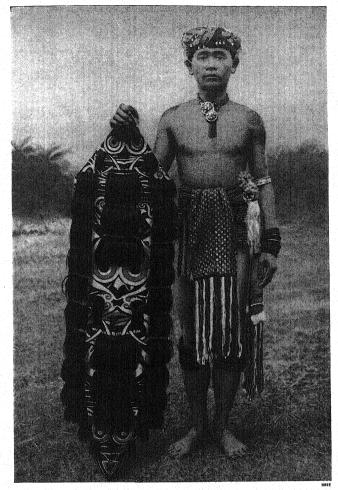
Borneo is a land of mystery and romance. Even in these days, when the darkest and most remote corners of the earth have yielded up their secrets to explorers, there are vast tracts of forest country in Borneo which are quite unknown. British and Malay settlements are situated around the coastal area, but the heart of the island is inhabited by savages who are primitive and wild. It is suspected that some of them are cannibals, and a few of them are undoubtedly still head-hunters.

Borneo is a land of mystery because there is so much still to be learned about its people and its natural resources. We know that in its forests there are valuable gutta-percha and rubber trees, coconut and sago palms, rattan canes and ironwood trees. It is rich, too, in orchids and all kinds of tropical flowering plants. In various districts there are coal, oil, gold, diamonds and other less important minerals.

Borneo is a land of romance because of its history. Of the original peoples who inhabited the island we know but little. When, centuries ago, it was overrun by Malays, these native tribes were driven inland. They still live in the heart of the forests—the Klemantans, Muruts, Kayans, Kenyahs and Punans—savages



A KLEMANTAN CHIEF, poised for battle, wears a war coat of the skin of a panther he has slain. His wooden shield, painted with tribal symbols, helps to ward off the spring of a cat, a tossed spear or the blows of an opponent's sword. Many such warriors have been coaxed out of the jungles to work in the mines and oil fields of the coastal settlements.



AMONG THE KENYAHS, the warriors paint upon their shields conventional designs of human faces, then ornament these grotesque escutcheons with tufts of hair from the heads of their slaughtered enemies. Their chief weapons are the sword and spear. Under Western influence native warfare has, however, been reduced chiefly to the avenging of injuries.

BORNEO THE ISLE OF SUMMER

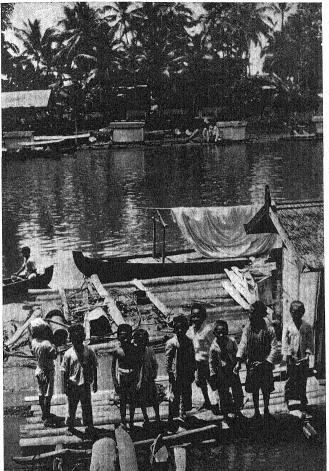
whose principal weapon is the blow-pipe, whose chief occupations are hunting and fighting. A sixth and very numerous people of Borneo are the Ihans, or Sea Dayaks, or Dyaks, on the lower reaches of the main rivers of Sarawak, but also to be found in British North Borneo and the adjacent Indonesian territory. (This territory was controlled by the Dutch until 1049.)

Control of Borneo is divided between Britain and Indonesia, the Dutch having withdrawn after Indonesia was granted her independence. The Dutch established trading posts as early as 1604, but gained little authority for more than two hundred years. The natives were difficult to control and pirates were numerous. It was extremely dangerous for a white man to venture far from the fortified towns.

The first white man who gained any influence over the natives was an Englishman, James Brooke, who had served the East India Company before he determined to put down piracy and civilize the inhabitants of Borneo. His resolve was due to a voyage to China during which his vessel made its way among islands marvelous



THE LANGUR, OR HANUMAN, MONKEY OF INDIA, BORNEO AND SUMATRA Langurs, distinguished by their long tails, beetling black eyebrows and general grayish color, are native to Indonesia as well as to India where they are free to roam the cities unrestricted.

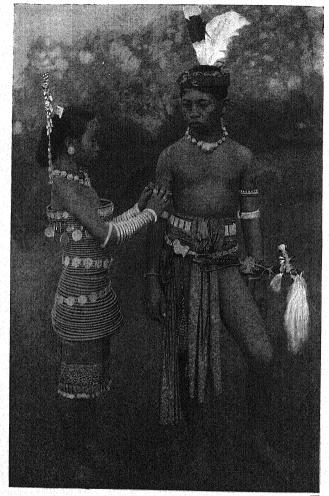


EWING GALLOWAY

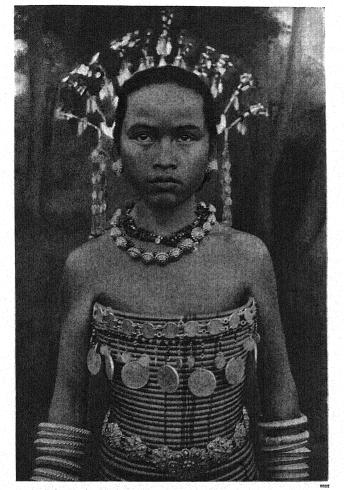
BORNEO YOUNGSTERS ON RIVER RAFT "WATCH THE BIRDIE"

The somewhat surprising name of this tiver is the Sooengookween, a tributary of the Barito in southern Borneo. It flows past the town of Banjermasin, a port of more than 65,000 people.

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THESE YOUNG IBANS of the Sea Dayak group of Bornean tribes wear a gala dress rise with ivory, shell and silver and gay with gold-embroidered scarlet. For a hot climate the boy's attire, which conceals none of his splendid muscular development, would seem the more appropriate, though even his sword and turban are elaborate with trophies of the chase.



THIS DAYAK GIRL wears a corselet of rattan hoops covered with brass rings, above a skirt fringed with coins, to match those around her chest. Her shell necklaces are heavy with silver, as are her belt and bracelets, while the rings in her ears conceal little bells. Her comb is decorated with silver fligree and tinsel. No wonder she looks weighted down!

for their scenery but inhabited by savage tribes who were the scourge of the South Seas. Eventually the young man equipped a large yacht and trained a picked crew of twenty for the adventure of civilizing the wild men of Borneo and others equally barbarous. When he started, in 1838, he was but thirty-six years of age; but he was made of heroic stuff.

When he landed at Sarawak in 1839 he found several Dayak tribes, ferocious head-hunters, in revolt against the ruling Sultan. The Sultan's uncle, Rajah Muda Hassim, accepted Brooke's proffered aid; and the Englishman, with his small crew and some Javanese who had joined them, fought a winning battle. In view of this service the Rajah insisted upon abdicating in Brooke's favor, though the Sultan did not confirm the title till two years later.

Rajah Brooke and the Pirates

Brooke now determined to suppress piracy for the sake of developing the commerce of the archipelago; and to this end he first attempted negotiations with the chiefs of the most warlike tribes, but to no avail. He then made successive expeditions against the Dayaks, Malays and Arabs who had been making the most ferocious raids upon white traders, in the course of which large numbers of the pirates were slain. On his return to London in 1847 he received high honors and was made consul-general to Borneo. The name of Sir James (Rajah) Brooke became world famous. For over a generation he ruled wisely, suppressed most of the head-hunting in British Borneo and persuaded large numbers of Dayaks to take up agriculture.

Now the Chinese who had been working in the alluvial gold deposits in Upper Sarawak sacked Kuching in 1867, burned Brooke's house, and would have taken his life but that his nephew raised a force of the Malays and Dayaks of the district and suppressed the insurgency. This nephew succeeded Sir James in 1868 and the office of rajah became hereditary in their family. North Borneo is now governed like a crown colony as an independent State under the protection of Great Britain.

Plantations and Lumbering

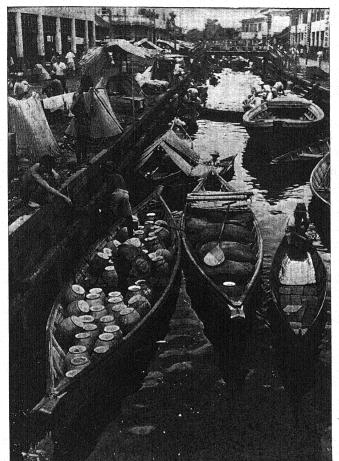
Besides Sarawak, British Borneo (which became a protectorate in 1881, and which consists mainly of Mohammedan Malays, with a sprinkling of white men and Chinese) includes Brunei and North Borneo. All have huge coffee, coconut and tobacco plantations and important lumber companies.

Brunei is a tiny Mohammedan state and there are very few Europeans. The chief town. Brunei, is so subject to the rise and fall of the water level that the British Resident who conducts the administration had his house built upon piles at the end of the river, while the jungle-clad hills rise up about the town. The old native quarter is, indeed, built entirely over the river and some of the dwellings actually float upon the water. The market venders, usually women in wide straw hats, array their stalls with many brass and silver articles to tempt the purse of the traveler, and with cotton cloth and foodstuffs, each in a little boat anchored to the pile dwellings, and to these the purchasers make their way in other boats under a bombardment of native vociferation. The scene presents mingled odors of fresh-caught fish, rotting piles, and over-hot humanity, while toward evening a million frogs play bass in a symphony of bird and insect sounds-and mosquitoes and sometimes ants puncture one with fiery thrusts and from the nearest jungle one may sometimes hear the cries of a band of monkeys.

As to British North Borneo, it has a coastline of over nine hundred miles and in Sandakan, on the east coast, the one fine natural harbor of the island. At this point Borneo lies so near the Philippines that ships can make the crossing in less than a day. The tourists will find good hotel accommodations at Sandakan, with such touches of Western civilization as an automatic telephone service, a scentific society and a racing association.

Sultan Wore Huge Diamonds

The portion of the island formerly called Dutch Borneo is now Indonesian



BLACK STAR

TRADE CENTER IN WEST BORNEO

Natives discharge their wares in Pontianak, capital of the state of West Borneo, which is now part of the Republic of Indonesia. The city is the center of Chinese and native trade, and many of the boats have been en route for days and weeks before reaching Pontianak. Resident Chinese dealers buy from the native producers. The chief commodities are rubber and copra.

Borneo or Kalimantan. It is a part of the Republic of Indonesia. On the whole, it is very much less developed than British Borneo, partly because of the sparsity of its population which is confined to settlements along the rivers. It is under the jurisdiction of a governor who is appointed by and is responsible to the central Indonesian Government.

At one time, during Dutch administration, this part of Borneo was under a Sultan. The Sultan had a palace lighted by electricity and protected from the rains by a galvanized iron roof, which was his great pride. He wore incredibly large diamonds as part of his attire and kept fighting cocks. In those days the Sultan's subjects were addicted to piracy and head-hunting, and they are still somewhat wild. Today, however, there are Arabs and Chinese in the mines and fisheries and on the planta-The Chinese conduct trade with their own country. Indonesian Borneo contains a wealth of minerals. There are big oil fields at Balik Papan, and new wells are continually being brought in. There are diamond fields, of which probably the richest lies at Martapura, and the timber (ironwood) and rubber industries are of considerable consequence because of the value of their products. In Martapura and several other districts of the southeastern division there is shipbuilding, iron-forging, diamond-polishing, gold and silver-smithery.

Borneo's location naturally directs her trade to China and Australia and to the Philippines. One expects her trading vessels to go forth laden with ironwood and rattan, rice, tobacco and spices, hemp, gums and resins. It is more surprising to find in their holds the gelantinous birds' nests found and collected in the vast sea caves of coastal regions, a Chinese delicacy, and bêche-de-mer, for the making of Chinese soup. There are also armadillo skins, seed pearls, gambier—a substance used in tanning and dyeing—camphor, and mineral oil from a rich field at Miri.

Need Roads and Railroads

One drawback to development in Borneo is the lack of good roads and railroads, though there are bridle paths and native trails. River boats connect the villages and coasting steamers ply from port to port.

Warring Tribes of the Interior

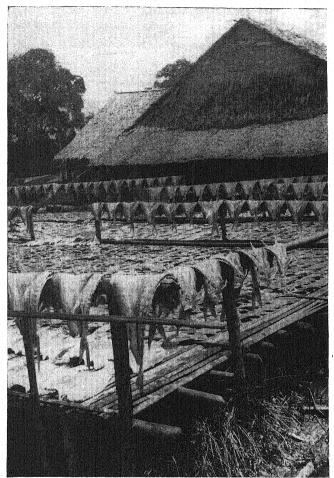
For the most part, as we have indicated, the dominant native population is Malay. More interesting as a matter of study are the savage races of the interior. Most of these tribes live in communities ruled by chiefs, but numbers of them wander about in the jungle, living on wild fruits and the flesh of wild animals. Being of different races and speaking languages that are unintelligible outside their own districts, they are constantly making warfare upon their neighbors. There is a good deal of sickness among the natives, due chiefly to lack of cleanliness about their persons and the food they consume.

In such a country as Borneo, with its thousands of miles of forest and jungle, the people of the interior are mainly dependent for their living upon the wild creatures found there, though sago is cultivated in some places, just as rice is widely grown in the more civilized districts. Fortunately for the aborigines, deer, wild pigs, wild cattle and other animals are plentiful. These are snared in traps or are brought down by a poisoned dart.

The Hairy "Man of the Woods"

Monkeys, which are numerous, are killed and eaten; and here reference must be made to Borneo's distinctive wild animal-the orang-utan. This great ape, whose name means literally "man of the woods," grows to a height of over four feet; its hair is reddish in color; and the extraordinary length of its arms enables it to travel at an extraordinary pace by swinging itself from tree to tree. Elephants also are found, but only in North Borneo. The tarsier, a mouselike creature that lives on insects, but is really a primate, and thus belongs to the same order as do the apes, is also a native of Borneo. It lives in trees and is most active at night.

There are tapirs and ant-eaters, a monitor lizard, pythons and cobras. There are



BRITISH INFORMATION SERVICES

NOT THE FAMILY WASHING, BUT FISH DRYING IN THE SUN

Just outside Kuching, capital of Sarawak, is a thriving community of Chinese fishermen who make their home there. After curing and drying their catch, they sell it in the Kuching market.

minas, birds that can be taught to speak. The honey-bear, by which is meant the little Malay bear, a lover of the stores of the wild bee of the jungle, is common in this land of queer creatures. There is also a mouse-deer or plandok, a dainty creature no longer than a rabbit and not nearly so heavy. A tender morsel for anyone or anything that can catch it, it goes leaping soundlessly through the brush, its big eyes seemingly round with fright.

Flying-frogs and "Pepper Ants"

At twilight the flying-foxes play by launching themselves parachute-like from the branches to the ground. There are even flying-frogs in the swamp lands. Less attractive wild swine, many with hornlike tusks, trot about in gluttonous herds, their little black eyes savage with hatred of the intruder. There are socalled Borneo ponies in British North Borneo; and if one is to enumerate several other living creatures that play a prominent rôle on this extraordinary island, one must name the fire ants and "pepper ants" with their painful bite, the sand-flies, the wood-leeches and in the marshes, the horse-leeches. The coastal waters are full of sharks. Scientists judge from the presence of a number of these species of animal life that the island may once have been connected with the continent of Asia.

Spiked Fruit and Pitcher Plants

Among other hazards of life in the jungle might be mentioned the durian, a large fruit covered with stout pyramidal spikes. When such an object falls from the top of a tall tree it really injures people. Its flesh is prized by the natives, though white men are appalled by its odor. Another strange thing found in Borneo is the pitcher plant, some of which are large enough to hold a quart of rain water.

Among the many interesting things to be seen in Borneo are the "long-houses," the wooden buildings in which communities generally dwell together. All the native tribes, with one exception, build these long-houses. The Punans, who wander

from spot to spot, but usually inhabit the densest part of the jungle, do not lead any kind of village life. When some of them have been induced to settle, they have only been able to construct the rudest of houses, a poor imitation of those of their neighbors.

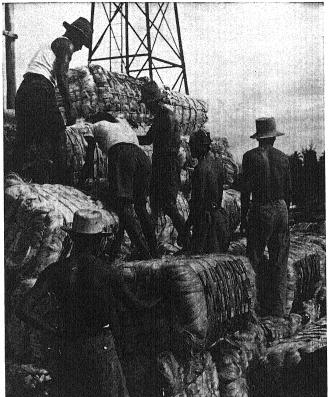
The long-houses of the various tribes differ only in size, in certain details of construction and in their decoration. One such house may be set up to accommodate fifty people; others will hold as many as three, and even five hundred. A long-house is built of wood and may be as much as four hundred yards in length with a long gallery, which serves as the village street, running along the front. The structure is divided into a number of rooms in which separate families lodge.

In a Kayan "Long-house"

If we were to peep into one of the rooms we should see that it was about twenty-five feet wide, that it contained several alcoves or sleeping-places screëned off at the sides, and that in the centre of the mat-covered floor was a rough fireplace made of a slab of clay in a wooden frame. For ventilation and light, a trapdoor, opened and closed at will, is fixed in the roof.

In addition to the family fireplaces, the tenants of a long-house have access to other fires that are kindled at intervals along the outer gallery. Some of these are kept continually alight. Over one of these communal fireplaces—usually the one near the chief's quarters—is to be seen a row of dried human heads, together with various charms and war troobies.

All such native dwelling-houses are built along, or near, the water. This is because rivers are the great highways of Borneo. There are no roads except in those coastal settlements where towns have sprung up, and there are not even beaten tracks of any importance through the jungle. The long-houses are built upon piles because they thus offer better protection against marauding headhunters; but the piles must be tall ones, for were the house not raised high from



RITISH INFORMATION SERVICES

THE STRINGY FIBERS of the hemp plant go into the making of sturdy ropes and cloths. These great bales of hemp are being stacked to await shipment from British North Borneo.

the ground, the sleeping immates might be speared through the floor from below. We shall see that under the house are stored the boats that are not in actual use. Here, too, will be some of the livestock of the village—pigs, dogs, goats and fowls—all of which add to the unsanitary condition, however convenient the arrangement.

Of the native peoples mentioned, the Sea Dayaks, or Ibans, are the best known to white men. This is mainly because they are numerous in Sarawak. Stouter in build than his land brothers, the Sea Dayak has well proportioned limbs, his figure is neat and almost boyish, and he walks with an air that stamps him as a

RORNEO THE ISLE OF SUMMER

resolute fellow. Though he is not displeasing in countenance, his lips and teeth are usually discolored by the chewing of hetel-nut.

The Sea Dayak is lively in disposition, often boastful and excitable, and always talkative and cheerful. His chief characteristic, however, is his restlessness. The darker side of the picture presents him as quarrelsome and treacherous, with little liking for discipline and with little loyalty to his chiefs. He is, moreover, an inveterate head-hunter.

The Kayans, who are found throughout central Borneo, are a warlike people, but they are less quarrelsome than the Dayaks. They excel above all things in various handicrafts. They are skilled in smelting iron and in the manufacture of swords. The Kayans are probably the

best boat-builders on the island, and some of their decorative work on the boats and on the paddles is very striking.

Both the Kayans and the Kenyahs are fairer of skin than are the other tribes, and their physique is finer. The Kenyahs have the reputation of being the most intelligent and courageous of all Borneo's native tribes.

The Punans are the most primitive of all the tribes. They roam the forests in bands, supporting themselves as they travel on wild sago and other natural products, and by shooting game with their blow-pipes. For most manufactured articles, such as swords, spears and cloth, they are dependent upon others. Even to make their blow-pipes they must go to the iron-working Kayans, for the metal rods used in boring the long tubes.

BORNEO: FACTS AND FIGURES

COVERNMENT

Great island in the Malay archipelago. Bounded on north and northwest by South China Sea, northeast by Sulu Sea, east by Celebes Sea and Strait of Macassar, south by Java Sea, and southwest by Karimata Strait. Area, 290,011 Sequare miles; estimated population, 3,224,000. Politically Borneo is divided into (1) British North Borneo, (2) Brunei, (3) Sarawak and (4) Indonesian Borneo.

BRITISH NORTH BORNEO

Occupies extreme northeast section of the island. Area, 29,500; population (est.), 345,-000, chiefly Mohammedan settlers on the coast and aboriginal tribes in the interior. Administration was by the North Borneo Company until July 15, 1946, when administrative rights were transferred to the first Colonial Government. Products: timber, sago, rice, coconuts, gums, coffee, gutta percha, rubber, tobacco, coal. Exports: rubber, camphor, timber, spices, birds' nests, seed pearls, sago, coffee. Rail-way, 116 miles. Communication by telegraph, telephone and wireless. Protestant and Catholic missions. Capital, Jesselton, population, 12000.

BRUNEI

Malayan Sultanate on northwest coast of island under British protection. General administration by British Resident. Area, 2,226; population, about 41,000, chiefly natives. Native industries: boat-building, brass foundries; chief products: mangrove extract, rubber, sago and timber. Imports: rice, tobacco, piece goods. There are 4 wireless stations; 25 vernacular schools with 2,000 pupils. Capital, Brunet, population, 10,600.

SARAWAK

Independent state on northwest coast of Borneo. Area, 50,000 square miles with 450 miles of coastlne; estimated population, 550,000. Under British protection; chief administrator a rajah. Products: sago, pepper, gold, rubber, gutta jelutong, gutta percha, cutch, crude oil and rattans. There are no railroads; 520 miles of roads; rivers used for internal transportation; 30 post offices; wireless stations; local government telephone system. Protestant and Catholic missions. Capital, Kuching, population 38,000.

INDONESIAN BORNEO (KALIMANTAN)

Central and southern section of the island, comprising nearly three-fourths the entire area. Two divisions: Western District, area, 5,664, population about \$50,000; Southern and Eastern Districts, area, 151,621; population, 1,438,000. Kalimantan is a province of the Republic of Indonesia and has a governor who is responsible to the central government in Jakarta, by which he is appointed. (See Indonesian Facts and Figures, page 256.) Chief occupations: mining, fishing, agriculture, spinning, weaving and dyeing, manufacture of iron implements, gold and diamond-polishing. Chief products: copra, petroleum, antimony, gold, diamonds, iron, mineral oils, timber, rice, pepper, tobacco, spices and coffee. Telephone, telegraph and radio communication. Entire religious liberty. Majority of natives Mohammedans. Protestant and Catholic missions. Government primary and secondary schools for all classes; instruction in native tongues and Dutch. Normal and technical schools. Capital, Banjermasin, population, 70,000.

NEW GUINEA

The World's Largest Tropical Island

Among the world's islands, only Greenland is larger than New Guinea. Extremely irregular in shape, on the map it looks like an ungainly bird—ths head, just south of the equator, pointing toward Indonesia; its tail bending down into the Coral Sea. From northwest to southeast, the island is about 1,500 miles long; the thickest part of the "body" is about 4,00 miles wide, and here the southern coast swerves close to the most northerly tip of Australia. Except for Antarctica and some parts of the Arctic region, probably no other part of the earth is still so little known as the wild interior of New Guinea.

As one approaches New Guinea from the sea, its mountainous mass looms dark against sunlit waters. The volcanic ranges seem to rise straight up out of a dense tangled mat of trees, shrubs and vines. Some of the soaring black peaks are well over 13,000 feet above sea level. On the highest summits, no more than 350 miles from the equator, snow fields glimmer. It is because of this formidable barrier of humid jungle and jagged mountain that New Guinea has kept the secrets of its savage heartland from all but the most hardy explorers.

The great spine that runs the length of the island is made up of the Nassau and Orange ranges, on the west, and the Bismarck Mountains and Owen Stanley Range, on the east. Within the Nassau Range is Mt. Carstensz (16,400 feet), the highest island peak in the world. On either side of the rugged backbone, but especially in the center, are vast lowlands drained by swift, torrential rivers. Though they are treacherous, small craft can ply them for some distance inland. Steam launches go up the Fly River, in the southeast, for 500 miles, and up the Sepik, in the northeast, for 300 miles.

New Guinea has two seasons. From October to April, monsoons from the northwest drench the lowlands with rain. Heavy clouds hide the sun, and the land swelters in an oppressive humidity. During the other months of the year, trade winds blowing from the southeast bring fairly dry weather. Temperature, however, varies not with the season but with

the time of day and the altitude. At sea level it ranges from about 70° to 95° F. The highlands, above three thousand feet, are cooler and also dryer.

Many parts of the coast are fringed with swamps, where the prop roots of mangroves mesh into impenetrable thickets. Elsewhere there are coconut groves and stretches of grassland with an occasional eucalyptus tree. You cannot travel very far inland, however, without entering the rain forest. In its gloomy depths the glossy leaves of rhododendrons shine wetly, exotic orchids seem to float on the air, giant ferns spread their lacy fronds and palms lift their spiky crowns toward the light. Farther up the mountain slopes are aloine plants, including such trees as pine and cedar. The valuable hardwoods -sandalwood, ebony-are widely scat-

The jungle is alive with creatures that fly and crawl and creep: plumed birds of paradise, cockatoos, vivid parrots, ostrichlike cassowaries, ibis, herons, doves; mosquitoes and exquisite butterflies; spiders. scorpions and mites. Crocodiles lurk in the streams, and there are lizards, pythons and poisonous snakes. Most of the few mammals are marsupials-pouched animals such as are found in Australiakangaroos, wallabies and bandicoots. Near coral reefs the coastal waters swarm with marine animals: fish, oysters, turtles, dolphins, dugongs, crabs, crayfish and the curious sea cucumbers, or trepangs.

Human beings have been making homes in New Guinea for perhaps 25,000 years,

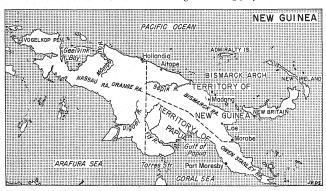


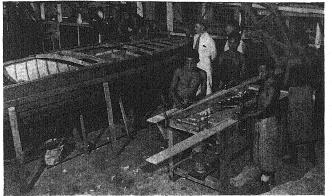
FOLIAGE AND FEATHERS, correct dress for a "sing-sing" ceremony in the highlands.

though it seems that they all first journeyed there from other places. Some traces have been found of a very early group, possibly related to the Australian aborigines. Torres Strait, between Australia's most northern point and New Guinea's south-central coast, is shallow

and only eighty miles wide. The next people to arrive were Negritos-short. energetic and Negroid in appearance. Today they are found mostly in isolated Then came waves of Papuans and Melanesians, whose descendants live along the coasts as well as in some valleys and on the lower slopes of mountains. The Papuans are rather dark, with fuzzy hair; the true Melanesians-"mopheads" -are taller, have finer features and may be quite light-skinned. Still later, in several stages, Polynesians-light-skinned and straight-haired-passed through on their way to the central Pacific. Last. before the first Europeans arrived, Malays, from Asia, came to western New Guinea.

None of these groups is completely distinct today. Actually the population is an extraordinary mixture, speaking a babble of tongues. No Oceanic people had a written language, and family lines can be unraveled for only a few generations back. Around the Sepik Valley, in the north, is a dark-skinned, hook-nosed group. In one remote interior region there are some families who look very much like blond white people and, within a few hundred miles, queer jungle wanderers, the Kukukukus, under four feet tall. On Manus, in the nearby Admiralty Islands, lives a Mongoloid-looking people.





ALL PHOTOS, AUSTRALIAN NEWS & INFORMATION BUREAU

BOAT-BUILDING SCHOOL at Port Moresby. The coastal people, long expert at making canoes by hollowing logs, quickly master the art of the lighter Western-style craft.

The first European to sight New Guinea, in 1512, was a Portuguese sea captain, Antonio d'Abreu. Another Portuguese navigator, Jorge de Meneses, visited the island in 1526–27 and named it Os Papuas, papuas meaning "frizzle-haired." In 1546, Ynigo Ortiz de Retez, a Spaniard, sailed part way along the coast. Fancying that it resembled the Guinea coast of West Africa, he gave the island its present name. It was not until 1767, however, that New Guinea was proved to be an island and not part of a southern continent.

Though a few other explorers touched at New Guinea from time to time, the unhealthy climate, the difficult terrain and the reputation of the natives for savagery left it isolated for many years after discovery. Early in the nineteenth century, however, European nations began to vie with each other in laying claim to undeveloped territories. So it was that the Dutch laid claim to the western half of New Guinea (a claim disputed by Indonesia today). Germany took possession of the northeast quarter, and Great Britain declared the southeast quarter a British protectorate, which was eventually transferred to Australia. Today all of

the eastern half is under Australia.

Some of the most fierce fighting of World War II raged on and around New Guinea, including the Battle of the Coral Sea. Coastal villages were transformed first to serve the Japanese and then the Allies. For the islanders the war provided an awesome glimpse of the might of the machine age. Since then a handful of New Guinea natives has been trying to bring twentieth-century enterprise to the island. Most of them, however, continue to live in the ways of their forefathers and are hardly out of the Stone Age. Among some of the villages perched high on the mountains or by streams in hidden vallevs, cannibalism and head-hunting may still be practiced.

Though coastal people may work for Europeans on plantations, the majority are subsistence farmers. On trim little garden plots they raise only enough food, chiefly yams, for their own needs and add to their diet by fishing or hunting wild pigs and small game. Usually the stockaded villages are self-contained and hostile to outsiders. For trading purposes the universal language is pidgin English. Pidgin is not slipshod English but has a special grammar and vocabulary with



A GLOBE fascinates the students of a government high school in Australian territory.

words drawn from Malay, native tongues, Portuguese, Dutch and German as well as English. There are some government schools, but for the most part missions supply what formal education the islanders receive.

Christianity has won many converts. Nevertheless, superstition and custom play a large role in the lives of the islanders. They have a vague idea of a universal spirit side by side with a belief in a number of evil spirits: the powerful Monoin, who is supposed to live in the woods; Narwoje, who lives in clouds; and Faknik, who lives in sea rocks and raises storms.

The houses are almost always built on

piles. In some places there are immense communal houses, sheltering a number of families, as much as 50 or 60 feet high and 600 to 700 feet long, thatched with palm branches and divided into compartments within.

The islanders are adept at wood carving and pottery and build excellent canoes. The larger boats, lakatois, are made of several dugouts lashed side by side, and their over-all width may be more than twenty feet. They are decked over and fitted with large, decorative sails. Fond of music, the people fashion flutes, drums and reed pipes. Bows and arrows and bamboo knives are their chief weapons.

New Guinea has fabulous wealth in gold. When the fields in the Morobe district (northeast) were discovered in the 1920's, the only quick way of getting the yellow metal out was by plane. Thus New Guinea, so primitive in other ways, was a pioneer in establishing regular air transportation. The area near Geelvink Bay (in the west) appears to be rich in oil though it has yet to be developed.

There are no real towns in New Guinea. Only Port Moresby, on the southeast, is of any importance, and its population is only about 1,300. By a freak of nature it is within a narrow dry belt and so has a fairly healthy climate. Its landlocked harbor can be reached only by an opening in the reef. In fact, nowhere is there a really easy approach to the island, and navigating what harbors there are requires expert seamanship.

NEW GUINEA: FACTS AND FIGURES

Bounded north and east by the Pacific Ocean, on the south by the Coral and Arafura seas, and on the west by the islands of Indonesia. The western half, including such offshore islands as the Schouten group, is Dutch New Guinea (Iriania)—claim disputed by Indonesia—area, 159,375 sq. mi.; population, about 350,000; capital, Hollandia. The northeast quarter, including the Bismarck Archipleago and the northernmost Solomons (Buka and Bougainville), is the Territory of New Guinea, a UN trusteship governed by Australia, area, 93,000 sq. mi.; population, about 1,080,000. And the southeast quarter, the propulation, about 1,080,000. And the southeast quarters are some contractions of the contraction of the contractio

ter, including the Louisiade Archipelago and the Trobriand, Woodlark and D'Entrecasteaux groups, is the Territory of Papua, under Australia, area, 90,540 sq. mi.; population, about 370,000. Port Moresby is the capital of both the territories of New Guinea and Papua. Coconuts chief commercial crop; some rubber, coffee and cacao plantations. Island has copper, silver, lead, zinc, osmium, graphite, coal and oil but only gold produced in any quantity. Chief exports, copra and gold. No railroads and few good highways; transportation mostly by air and water.

THE PACIFIC ISLANDS

Steppingstones in the Tropical Sea

Though they are often called the islands of the South Seas, the phrase is not strictly accurate. Many of the islands are north of the equator and so are in the North Pacific Ocean. However, almost all of them do lie between the Tropic of Cancer and the Tropic of Capricorn. On an ordinary map, they look like mere dots scattered at random in the immensity of the sea. Here we tell you how they are formed—by the work of volcanoes and coral polyps—and how the people on them live. New Zealand, far to the south, and New Guinea, the largest of the tropical islands, are discussed elsewhere.

HE islands of the tropical Pacific are beautiful and often romantic. Idyls of the South Seas have formed an enduring part of the folklore of the Western world since the discovery of the islands in the seventeenth and eighteenth centuries, and these tales and descriptions are by no means all fantasy. There is a magical beauty to the coconut palms leaning out from a backdrop of lush green, over a white coral beach and the luminously blue water of a lagoona beauty whose reality is more compelling than pictures can show or imagination can paint. Add to the lagoon an outrigger canoe of no great size whose crew have sailed it over hundreds of miles of open ocean just to visit relatives on this island, and the picture takes on an epic quality. But then we must also add a small army of flies and mosquitoes which attack us with determination as we watch. These insects also will probably bring the natives on the outrigger to their deaths from illness more surely than the perils they face from storm and calm at sea. Nor are insects the only problem with which the islanders have to contend. While we may dream of the rich beauty of their home, they are likely to be dreaming of the luxury and excitement of ours.

Much of the charm of the islands for a Westerner derives from their small size. Although the long, irregular line of alternating coral reef and sandy islands of an atoll may enclose a great lagoon, outside of Melanesia a single island fifty miles long is very big in this ocean. Many densely populated islands are only

a mile or less in their longest dimension.

These little bits of solid footing which appear so surprisingly in the thousands of miles of constantly moving ocean are divided into high and low islands. All the larger ones are high islands. The distinction rests on the type of rock and soil of which they are formed. Low islands are all coral and coral sand. Some plants will grow directly in the sand. Those food crops that require richer soil subsist in spots where the products of the gradual decay of plant and animal life have mixed with the sand, enriching it and breaking down the grains through acid chemical action.

Building good soil by nature's methods requires years or even centuries. However, the islanders often speed up the process by laborious digging of swamps for taro in the middle of the islands. The fertility of these swamps can be destroyed or retarded for years by the inroads of a sea whipped up by hurricane or typhoon.

Fresh water comes from the rains which usually fall often enough to avoid a crisis. The rain water sinks into the porous sand and, being lighter, floats on the salty ocean water which seeps in below. Surprisingly little mixture takes place. It is only in time of drought that the fresh-water "lens" becomes thin enough to make the shallow wells unpleasantly brackish.

In addition, those islanders fortunate enough to obtain steel fuel drums use them to collect rain water off the corrugated iron roofs, for drinking. These



R. I. NESMITH

SOUTH SEA IDYL—on Moorea, in the Society Islands. The huge nets being mended in the shallows have weights on the edge and are large enough to trap whole schools of wriggling fish.

trappings of civilization entered the Pacific conveniently along with the copra trade. This trade made coconuts with meat ripe for drying too valuable to permit wholesale opening of young nuts to drink their water.

The high islands are formed of volcanic rock, mostly fine-grained black basalt. The iron in it gives the soil a characteristic red-orange color which stands in sharp contrast to the lush green when a hillside is scarred. Without the humus of decaying vegetation, this soil is not very fertile either, but it builds up its fertility more rapidly than coral sand and contains a richer store of the minerals necessary for life. Consequently, the high islands become a natural focus for seafaring visitors from coral atolls often hundreds of miles away. In the past the visitors came to share in the greater variety and abundance of foods, woods and other vegetable products produced by the volcanic soil. Today, in addition to these lures, there are medical services and other benefits of civilization available at the administrative centers—which are established on the larger and usually more heavily populated islands.

Many of the high islands are truly magnificent. From a distance they appear buttressed against the watery world about them by sheer black basalt cliffs slashed by deep, thickly wooded valleys and topped by a mat of green wherever vegetation can gain a foothold. The precipices often alternate with stretches of flat or rolling foreshore, and back toward the middle of the island are steep peaks, their tops hidden by mist and low clouds. Not all are like this, for the older islands have weathered down to less dramatic hills and valleys, their scenic disadvantages more than compensated for by the increase in arable land. Along the shore, or farther out, enclosing a lagoon, is the ever present coral reef, portent of the future when, millenniums from now, the mighty island will have disappeared, leaving behind only its reef. It will then be a typical atoll, punctuated at intervals with low coral islands.

Nearly a century ago Charles Darwin put forward the theory that both the high and low islands had a common origin, a theory that waited until the first atomicbomb tests on Bikini for its final proof. The islands came into being in an appropriately dramatic fashion, each born of a vast undersea volcano which buckled up the ocean bottom and welled up with lava -seething in the boiling, steaming water -until it burst forth above the surface of the ocean and gradually cooled. Though inside the hard outer shell the molten rock staved hot long enough to begin crystallizing into fine-grained basalt. As soon as the outer part was sufficiently cool, coral began building along the shore line where the warm tropical water broke in waves on the jagged rock.

Polyps Build the Coral Reefs

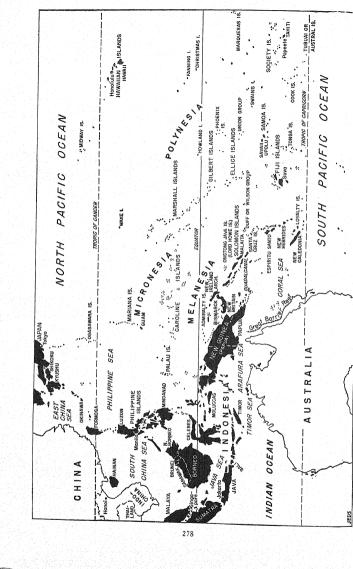
Coral is formed by uncounted billions of tiny organisms, called polyps, which extract calcium carbonate-the principal ingredient of plaster-from sea water and build about them tiny shells, cemented to the rock below and soon surrounded by others above and on all sides. They can adhere to any rock but require two conditions for their growth: warm sea water and plenty of oxygen. As a result, coral appears only in or near the tropics and grows near the surface of the water. The polyps thrive and multiply most vigorously where the massive ocean waves smash on the shore and churn bubbles of air profusely into the water.

No sooner have the volcanic islands been heaved up from the ocean floor than they begin slowly to sink back. The earth's surface seeks a balance as it floats on molten rock deep below. The vast weight of rock bears down on the solid crust, and it gradually gives away under the load, often pulling down the ocean floor around it to form depressions of great depth. The sinking is very slow, and meanwhile the billions of polyps along the shore of the new island are building upon each other. When the organisms

die, calcium carbonate in the water continues slowly to precipitate in and around the cores of the microscopic shells, so that in time lower levels turn into dense, strong limestone. At the surface, more coral is constantly growing, much of it beautiful to look at underwater, but fragile. The pounding waves break off fragments which fall inside the reef to fill the widening lagoon or outside to build up a slope down to the ocean bottom. coral grows upward over its original shore-line foundations, while the size of the sinking island showing above the surface gradually decreases. The lagoon grows larger until only the highest peaks of the original island appear as separate islands inside the barrier reef, and finally disappear completely beneath the surface, smothered in coral. There remains a typical reef atoll, its outline determined by the shore line of the volcanic island upon which it was born. Low islands appear here and there where the waves have driven sand up onto the still growing reef. Seismographs (earthquake recorders) on Bikini recorded the change in path of the shock waves, from the bomb, as they passed through the denser basaltic core beneath the coral crown of the atoll. Thus was demonstrated the correctness of Darwin's century-old surmise.

The Lagoon of Truk

Surprisingly enough, among all the larger islands of the Pacific only a few are in the middle of the change from high to low islands. Truk, in the Caroline Islands, is typical and shows its history The barrier reef of Truk enclearly. closes a lagoon thirty to forty miles across, with islands projecting steeply here and there inside, none of them more than five miles across. These are the mountaintops of a once great volcanic island. Each little island has its own reef about it, narrower and growing more slowly than the barrier reef because the smaller waves in the lagoon carry less oxygen down into the water. A few low, sandy islands or half-submerged reefs inside the atoll mark the location of somewhat lower peaks which have recently disappeared under



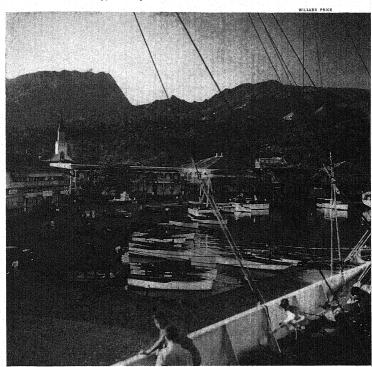
THE PACIFIC ISLANDS

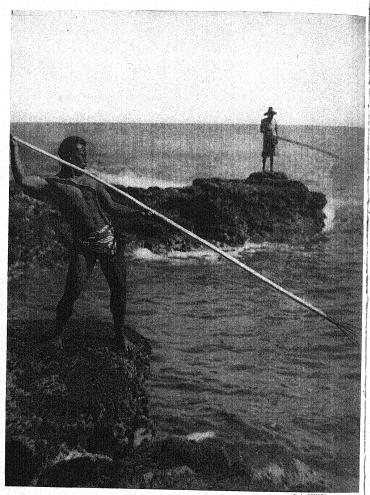
the coral. Most of the other large, high islands of the Pacific have only begun to sink away and have fringing reefs at or near their rocky shores.

The waters that pound against the reefs and stretch for such vast expanses between islands are uniformly warm. No cold currents intrude into the central and western Pacific. The microscopic plankton, which abounds in colder waters and gives them a dark greenish tinge, is comparatively scant in warm seas, leaving the water about the coral reefs crystal clear. From the air the varying shades of blue (reflected from the sky) indicate depths so clearly that a color photograph can substitute for an accurate chart of the waters in a lagoon. In shallower waters the changes in color can even be used to navigate boats through the reefs.

In the open ocean, the waters move in three great currents. The South Equato-

THE HARBOR OF PAPEETE, Tahiti's port town. It is a haven for large and small craft. Tahiti is noted for its beauty, and many artists and writers have been attracted there.





A POLYNESIAN aiming a pronged fish spear. Polynesians are as much at home in the water as on land, and the vigorous outdoor life they lead shows in their strong, muscular physiques.

rial flows westward just below the equator, dragging its feet, as it were, and not quite keeping up with the hurried rotation of the earth. Its counterpart several hundred miles to the north is the North Equatorial Current, also running westward. In between, the Equatorial Countercurrent drives eastward, carrying back the water piled up by the other currents moving west. Only part of this water can be accommodated by the endless swirl of currents that circle about the northern and southern Pacific shores, clockwise in the north and counterclockwise in the south. The borders between the equatorial currents shift about somewhat, but, because they are all warm, the changes make little difference to life on the islands. shifts, however, cost people their lives on those occasions when the navigators of sailing canoes are becalmed and assume they are drifting one way when actually they are traveling the other. The course they set when the winds rise again carries them not to the speck of land they seek but out into the trackless ocean where they die of thirst and exposure. As we shall discuss later, some of the island people are highly effective navigators, but they depend on dead reckoning and once lost through calm or storm can find land only if they are lucky enough to sail nearby.

Where Trade Winds Meet

The trade winds follow somewhat the same pattern as the currents below them. The northeast trades blow westward down toward the equator, while the southeast trades also blow westerly toward the equator from the other hemisphere. In between are the doldrums. Here the air blowing from north and south meets and rises to great altitudes and then flows toward the poles. The rising air leaves beneath it unstable winds, periods of flat calm and occasional great, tortured tropical storms-called hurricanes in the central Pacific and typhoons to the west. The doldrum belt follows the sun, shifting across the equator to visit the tropics of each hemisphere during its summer months. When the doldrums move over, they disrupt the even flow of the trades and make hazardous any voyages in small craft out of sight of land.

People who live on small islands, to whom the sea is as important as the land, are very conscious of the weather and particularly of the winds. The trade winds are friendly, reassuring, reliable and useful. Relationships between people who live on islands that lie on a line at right angles to the path of the trades-so that one may sail between them on one tack with the wind on the beam-tend to be closer than those on islands between which one must sail up against the wind in one direction. When the trades are blowing, there is enough rain but seldom too much. the storms are mild and rare and life is predictable and good. The doldrums bring uncertainty, inconvenience, discomfort and the possibility of a storm which can sweep waves into or even over a low island. Even the high islands suffer great damage in these storms which flood the low-lying gardens and taro swamps, uproot dozens of vital coconut and breadfruit trees and wither many more with onslaughts of flying salt spray.

The islands of the tropical Pacific Ocean fall into three major divisions based largely on differences in the speech, culture and physical appearance of the natives who live on them. Their names are misleading: Polynesia, derived from Greek words meaning "the many islands," although the leadership in number of islands is not readily apparent and would probably rest on how big a speck of land one dignifies by the name "island"; Micronesia, "the little islands," despite the fact that all three divisions have their share of large and small islands; and Melanesia, "the black islands," referring apparently to the color of the natives' skin, although some Micronesians are equally as dark in color as the Melanesians.

Polynesia's Extent

Polynesia stretches over the greatest expanse of ocean of the three, extending from Hawaii in the north to New Zealand in the southwest and Easter Island in the southeast. New Zealand does not concern us here. It lies far to the south of



TAHITI CHARM—the girl is a winning example of young Polynesian women.

the rest of Polynesia, well out of the tropics. Both Easter Island, famous for its great carved stone heads, and its nearest neighbor, Pitcairn Island, final home of the mutineers of the Bounty, are slightly south of the Tropic of Capricorn and have no real Polynesian population. Leaving these out, our Polynesian triangle still runs from Hawaii respectively southwest to Tonga and southeast to the Tuamotus, some 2,500 miles on a side—to say nothing of a string of little isolated Polynesian islands scattered along the northern edge of Melanesia for a thousand miles still farther west.

Polynesia has provided the setting for the vast majority of tales and descriptions of the South Seas. The people are light in color, near to that of Italians and Spaniards, often tall and strikingly handsome, with strong, square faces whose prominent cheekbones give them an exotic touch in Western eyes. Their hair is wavy brown or black. Although the Polynesian ideal of feminine beauty favors fatness, particularly in the upper classes, the younger women are often very attractive by Western standards—a fact that made many of their early contacts with crews of Euro-

pean ships bloody and unpleasant for the Polynesians. The charm of these people and the beauty and ease of their islands have attracted a steady stream of artists and writers—great, near-great and just wistful beachcombers—particularly to Tahiti, as well as Samoa. Gauguin, Robert Louis Stevenson and an increasing number of lesser figures showed the way and provided the inspiration. Charles Nordhoff and James Norman Hall teamed up to become the highly effective apostles of more recent generations.

Arts and Crafts of a High Order

The early explorers in Polynesia, from Captain Cook onward, were amazed to discover a people whose implements included no metal and yet who executed beautiful wood carvings and feather work and built canoes with which they moved whole communities to islands a thousand miles away over the open sea. Although the explorers failed fully to understand the subtleties of sacred taboo and the supernatural qualities of rank, they found a complex system of noble families lording it over the commoners, reaching a peak on the Hawaiian Islands in royal families.

The superficial similarities with European society at the time left the early discoverers awed, and the later visits by Polynesian nobility to Europe were less absurd than one might expect. Hawaiian royalty became sufficiently concerned with the purity of the ancestral line to institute the custom of marriage between brother and sister to produce an heir, a device known elsewhere only among the Incas of Peru and the pharaohs of ancient Egypt. The similarity of Polynesian noble lines with those of Europe was the more striking because, unlike the other Oceanic peoples, the Polynesians reckon descent through both the male and female lines. In Micronesia and Melanesia, kin groups trace their ancestry through only the male or the female line-more commonly the

Polynesia was the first of the three groups of Pacific islands to be colonized extensively by missionaries, traders, adventurers and other outsiders, virtually

THE PACIFIC ISLANDS

all European. Eventually the combination of fairly large size, good harbors and the lack of malaria (true of Micronesia as well) led practically all the major European powers to stumble over each other in attempts to claim and develop the islands.

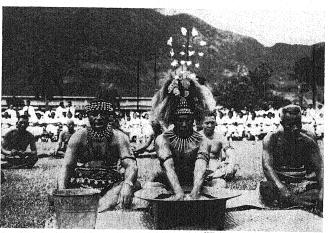
Disease, particularly smallpox, almost at once caused a tremendous loss in population. On most islands this loss has never been fully regained in spite of the ever growing caliber of medical and health services available. Tuberculosis and pneumonia, the latter often resulting from colds and other respiratory infections of which new strains are constantly being brought in by foreign visitors, take a slower but steady toll throughout the Pacific.

Although immigration has been severely limited on most islands, Hawaii was opened up early to laborers from Asia and immigrants from the United States and, particularly, Portugal. These new-comers intermarried with the remaining native population and practically obliter-

ated it, so that there are now a mere handful of pure Hawaiians left. Yet even to the present day, a dash of Polynesian blood is announced with pride by its bearer.

The Polynesians adapted readily to many aspects of Western technology and learned especially to build and sail cutters and larger boats of European origin. No open-water voyages are made nowadays in native boats. Metal tools, of course, replaced bone, shell and stone implements very early. Electricity is commonplace on many of the larger islands. The Polynesians in general have been weaned further away from their ancient methods than have the other groups. World War II, although many Polynesian islands played important roles in the supply and communications support of operations farther to the west, none of them was the scene of actual fighting (except for the attack on Pearl Harbor).

Melanesia, "the black islands," stands in considerable contrast with Polynesia in



GOVT. OF AMERICAN SAMOA, DEPT. OF THE INTERIOR

KAVA CEREMONY in Samoa. Water or coconut milk is added to the crushed roots or leaves of the kava plant (a pepper relative). The beverage at first tastes sweet, then pungent.

the history of its relations with the West. The anopheles mosquito, carrier of malaria, is prevalent throughout most of the area (Fiji and New Caledonia are exceptions), and the effect of malaria on Caucasians is almost as disastrous as are smallpox and tuberculosis on the native islanders. Furthermore, the appearance of the natives is quite forbidding to a Westerner. They are very dark in color and Negroid in appearance, with hair that is tightly curled. This permits the men in particular to let it grow into a tight, fuzzy ball which rises from their heads in a spectacular mass, decorated with ornaments stuck in here and there. Finally, cannibalism was formerly commonplace (and possibly there are occasional outbreaks even today). Some of its appeal rested upon the logical, if unpleasant, observation that it takes much less effort to go over to a neighboring village or island and get a "long pig" than it does to raise a real pig. Real pigs eat the same food as humans and do nothing toward raising their own vegetables. More important motives, however, were vengeance and the magical benefits of eating a brave man. The combination of these factors-malaria, physical appearance of the natives and cannibalism-gave the islands of Melanesia a reputation of substantially less charm and safety than that of Polynesia, with a resultant delay in the inroads of Westerners. Of course, not all Polynesians are attractive, and cannibalism also occurred on some Polynesian islands, but Melanesia always had a worse reputation. A number of heroic missionaries were the first white men to set foot on several of the islands. Many lost their lives to spears or disease. The traders who followed them were few in number for many years, and the area was definitely not a mecca for beachcombers.

Islands of Melanesia

The islands themselves, many of which are high and large, lie well within the tropics, extending in a long are from the Admiralties and New Britain, off the northeast coast of New Guinea, southeastward to Fiji, close to Polynesian Samoa.

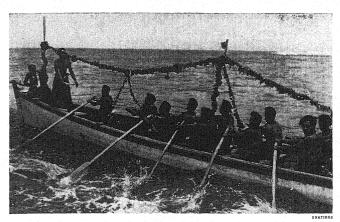
Many islands are covered with dense jungle growth, in part a result of the practice of clearing ground for gardening by burning it off. When the fields are later abandoned, the trees are gone, and thick brush covers the area. This is hard to penetrate on foot and has provided yet another bar to exploitation or even exploration by foreigners. However, the brush tends to hold the soil and is easily cleared again after the ground has lain fallow for a time. So burning makes good sense for the small gardeners on these jungle-clad islands.

Melanesian Men's Societies

One of the more striking features of social organization on many of the islands of Melanesia is the system of men's societies based on age groups. Adolescent boys are initiated into their society in elaborate and often frightening ceremonies conducted by masked figures representing demons bent on the youths' destruction. Pigs are slaughtered for a feast. Finally the boys, sworn to secrecy, learn that the demons are none other than the men of the village. Members of a group of initiates belong to the same society all their lives, rising in rank as they grow older. The next group of adolescents joins a different society in a complicated round robin of ritual memberships, Coupled with this is a system of reckoning kinship which in some parts of Melanesia reaches a complexity equaled only in Australiaand anything more complex than the Australian systems would defy the imagina-

The houses within which most of the activities of the men's societies take place are spectacular structures. They are built of timbers lashed together and topped by a peaked thatched roof which curves upward at one end to an imposing height. The house posts bear carved wooden figures.

The Melanesians adopted European metal tools as rapidly as they could obtain them, engaged in trade with sandalwood and later copra as their principal export and were subject to administrative control and medical attention by Westerners. In many cases they were converted to Chris-



A FAUTASI (LONG BOAT) puts out to sea from a Samoan island. For a special occasion, garlands adorn the craft. The oarsmen can pull it through the swells with astonishing speed.

tianity by missionaries. Otherwise they generally followed their old customs and standards as closely as any people in the Pacific-all this until World War II. Guadalcanal and Bougainville in the Solomons and Manus in the Admiralty Islands were the scenes of the most epic of the battles, but practically all the Melanesian islands felt the impact of the war. Where bases were built, the influx of American GI's was a fabulous experience, puzzling and disrupting, but exciting and profitable in material goods, many of which were put to uses far from their original intent. James Michener's Tales of the South Pacific is set in Melanesia, and, although it is told largely from the viewpoint of the GI's, it gives a good picture of the manner in which the islands were overwhelmed.

The letdown after the war was over and the bases were dismantled created a difficult period of adustment for many Melanesians. This adjustment gave an odd twist to a phenomenon that antedates the war, the so-called cargo cults in western Melanesia. Such a cult begins with a person having a vision, in which is predicted the arrival of a ship loaded with all

the material bounty civilization can offer. The natives will then live in luxury for the rest of their lives. Believing this prophecy, hundreds of people destroy their possessions and await the bonanza which never comes. These bizarre cults still sweep villages and whole groups of islands at intervals. Now, however, it is often not merely a ship bearing a wonderful cargo that is predicted but an American base and GI's.

Micronesia completes the roster of the tropical Pacific islands. Whereas Polynesia straddles the equator to extend the full width of the tropics, Melanesia, in the western ocean, lies entirely to the south of the equator, and Micronesia (with the exception of part of the Gilbert group) to the north.

The Micronesian islands lie on three sides of a triangle, with empty ocean in the middle. In the east are the Marshalls and Gilberts, all low islands, running southeastward toward Polynesia. On the west is the short side of the triangle, the Marianas, all high islands, including Guam and Saipan. Along the south, paralleling the equator are the Caroline Islands, both high and low.

The Micronesians, with the exception of those on Guam and Saipan, have been surprisingly little affected by their century or so of continuing contact with foreigners. The German Jaluit Company, which had both trading and administrative functions, developed the Marshalls and (later) the Carolines. It maintained law and order and fostered the copra trade but made little effort otherwise to change the native way of life-except for registering land titles with sons designated as heirs, in accordance with German custom, on islands where inheritance follows the female line. The Jaluit Company dominated the scene, and the effects of visiting whalers, free-lance traders and the earlier efforts of the Spanish in the Carolines were of minor importance.

The Spaniards concentrated their efforts on the Marianas until they lost Guam to the United States in the Spanish-American War and withdrew from the During the nineteenth century, Guam was the showcase for Spain in the Pacific. The Guamanians were strongly Europeanized and mixed with foreign strains in both race and language. (Today they speak a mixed language called Chamorro.) After disturbances on Saipan, the Spaniards removed everyone on the island to Guam. Later they imported Guamanians and natives of the Carolines to develop sugar plantations on Saipan. However, the Marianas are a special case in Micronesia and need not further concern us here. The Gilberts, with the exception of Ocean Island, which is rich in phosphates, have been developed by the British at the same modest pace as the rest of the islands of Micronesia.

Micronesia under the Japanese

The Japanese took over all of Micronesia except the Gilberts and Guam in 1914 and soon began intensive economic development to support their overcrowded home islands. This changed increasingly to a military build-up during the 1930's. In both cases the skilled labor was provided by Japanese and Okinawans so that the Micronesians learned little of foreign techniques. After the second World War, the United States took over the islands held by the Japanese, under a United Nations trusteeship. Since then efforts have been concentrated on trying to make the Micronesians self-sufficient

economically and politically.

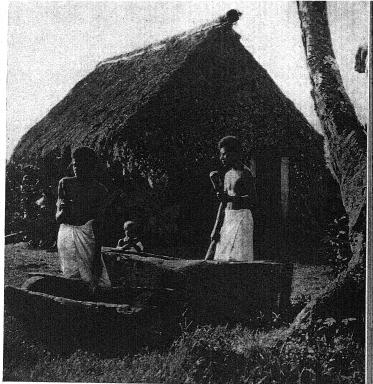
Micronesia has thus been unique in the Pacific in the degree to which it has been treated as a whole, each island and group (except the Marianas) subject to a common policy. It is also exceptional in the way it has become enmeshed in the flux of history without any major assault on the fabric of native custom. Some islands -such as Kwajalein, Bikini and Enjwetok-were rendered practically uninhabitable by the war and its atomic aftermath. But natives on the other islands tend to view the war as a time of trouble that is now mercifully past. Even such battered islands as Peleliu, Guam and Saipan have recovered in fair degree.

The Variety of Micronesians

There is much variation in the physical appearance of Micronesians. They range in skin color from the lightness of Polynesians to the darkness of Melanesians. They have straight Mongoloid hair, wavy hair or even tightly curled hair, but it is almost always black. They are tall or short, stocky or thin. In many respects the Micronesians resemble the Indonesians and Filipinos to the west of them. However, there is increasing evidence from studies of language, culture and traditional history that Micronesia was not populated directly from the Indonesian area. Rather, there was a movement of people through New Guinea and Melanesia who entered what is now Micronesia in its southeast portion and worked back to the north and west. Even the Polynesians may have followed the same route through Melanesia to reach their present islands.

Like the Polynesians, the Micronesians have nobility and commoners with multiple noble lines of varying rank. They differ from the Polynesians in tracing descent through the female line and lack much of the supernatural and ritual as-

pects of taboo.



WING GALLOWAY

FIJI ISLANDERS pound on dugouts to announce church services. The Fijis are Melanesians, with dark skins and fuzzy hair, and are among the most progressive of all this group.

Truk and the low islands to the west of Truk are an exception in that they have only local chiefs, representing extended family groups which happen at the time to be the most numerous and powerful.

Only a handful of Micronesians have thus far learned to build their own Western-style boats. So Micronesia remains the only part of the Pacific in which the natives regularly make long ocean voyages—up to two hundred miles or so—in canoes, using navigational techniques that are among the most intricate ever studied.

Despite the differences between Polynesia, Melanesia and Micronesia—only a few of which have been highlighted in the preceding pages—in the daily round of life on the Pacific islands the similarities from one island to the next outweigh the differences. Probably by now the differences in the old cultures are less important in determining the way of life on the various islands than is the amount of change brought about by foreign influ

THE PACIFIC ISLANDS

ences. However, the old cultures and particularly the attitudes they instilled undoubtedly affected in various ways the response of different groups of natives to outsiders. For example, the natives on the high islands of Truk were accustomed of old to find people from distant places with different customs sailing into the lagoon on canoes. The Trukese learned to treat them with respect to their faces, though sometimes derided them behind their backs-a formula well adapted to dealing with European administrators. Perhaps because of this experience of their ancestors, the Trukese have taken the Germans and the Japanese and the Americans rather easily in their stride, learning with some facility how to handle both the

foreigners and their policies.

Much of the similarity in daily life stems from the sameness of climate and of resources on the Pacific islands and in the seas and lagoons surrounding them. All the islands have the limitation of essentially infertile subsoil with only a thin layer of humus on top. On the low islands this subsoil is formed of the almost sterile coral sand, which underlies everything, while on the high islands the steen slopes constantly washed by downpours will not hold a thick layer of soft rich soil. The only place where such soil can accumulate deeply on most islands is in swamps-in which, through much of the Pacific, thrives taro.

Taro is a gray-colored tuber topped by



EWING GALLOWAY

A STREET IN SUVA, on the island of Viti Levu. Suva is the capital of the whole Fiji Islands colony. It has a fine harbor inside a barrier reef that forms a natural breakwater.

heart-shaped leaves, several varieties of which grow best in the soggy soil of swamps and can tolerate some brackishness, although a real flood of sea water in a storm can stunt or kill them. Other types of taro grow on dry land and, especially in Melanesia, are cultivated extensively. Some varieties grow to great size. with a single tuber of many pounds in weight and leaves taller than a man. When the tuber of swamp taro is dug out. the shoots are stuck back in the ooze. where they grow a new root worth digging after only a year-or two if there is plenty of food and one can afford to let taro grow.

Taro is usually baked or steamed, the outer skin cut off, and the tuber pounded with a stone pestle on a hardwood plank into a gray mass. This process of baking or steaming, peeling and pounding is a common way of preparing everyday starch foods of all kinds in the Pacific. It results in a meal that is notably dull and bland to the Western palate. Such food is frequently referred to by the Hawaiian term poi," although in Hawaii the word refers only to taro poi. In Polynesia, taro and other forms of poi are commonly kept for several days before eating. The warm climate causes the poi to ferment which lends some tang to the taste. If packaged in leaves for eating, the fermentation of poi is uneven and causes the growth of a mold that is extremely unpleasant.

Sweet Potatoes, Yams and Manioc

Other important root crops in the Pacific-although they grow well only on high islands-are sweet potatoes, yams and manioc (also known as cassava or tapioca). Sweet potatoes are common in Polynesia and parts of Melanesia. Yams, which are similar to the sweet potato but larger, are a favorite food for feasts. A really large yam takes years to grow and, roasted whole, demonstrates that its cultivator could afford to leave it in the ground, having plenty of other food to eat. Yams are an important staple food in Melanesia, second in importance only to taro on most islands. Manioc was introduced in historic times and is grown particularly in Micronesia, especially on those high islands where for some reason yams are not cultivated. It is starchy and filling but almost completely tasteless after it has been cooked. It is usually prepared only when there is not enough taro and breadfruit is out of season.

Breadfruit-Food for the Picking

Breadfruit grows on trees that often develop to great size-the largest, strangely enough, being found on low islands. Breadfruit trees have the ability, essential on these islands, to support and nourish themselves with shallow roots which extend outward through the thin layer of fertile soil. As the tree grows, the roots swell above the surface and often develop slablike buttresses to support the trunk against the wind. On islands where breadfruit is important, the introduction of cattle or any heavy-hoofed animals that may damage the roots can create serious problems. The fruit itself is somewhat smaller than a football, with a shiny green exterior which is in most varieties bumpy or even spiny. Inside, it is starchy and fibrous, forming a rather dry poi when prepared in that fashion. Again, most Westerners find it a pretty dull food (even when, after a couple of days, it has grown a mold luxuriant in the beauty of its colors). Some favor French-fried breadfruit while others feel the dish would be greatly improved by substituting potatoes.

However, many of the islanders view breadfruit as the ideal food, and when away from their islands are as homesick for breadfruit as for home. This is probably because breadfruit trees bear only once a year, and an island is lucky on which all the trees do not bear at once. When the fruit is ripe, there is a time of plenty. Then a man can return from an hour or two of climbing and picking, burdened down with food-on which he has had to expend no previous effort. The island rings with the "clop! clop!" of men pounding steamed breadfruit and no one is hungry. It is indeed a time to look back upon when the breadfruit is gone.

Against these barren days high islanders can preserve breadfruit—but this is a

very different thing from the fresh product. The raw fruit is peeled and buried in pits lined with leaves, where it ferments for months. The nearness of water beneath the surface of most low islands makes this such a hazardous operation that it is not usually undertaken there. The presence of much water will cause fermentation to become rot-a fine distinction but an important one. When the breadfruit is removed, steamed and pounded, it has the odor of ripe cheesewhich provides an interesting commentary on cultural bias, since most Westerners are as repelled by preserved breadfruit as the natives are by ripe cheese. Whatever we may think of it, there is some evidence that breadfruit is higher in vitamin content when preserved than when fresh.

Reddish Wood from Breadfruit Trees

Breadfruit trees contribute almost as much to the island economy in their timber as in providing food. Breadfruit wood is reddish in color, easily worked, resistant to splitting and-in some varietiesalmost completely impervious to marine rot and borers. Out of it are made canoes, house timbers, bowls, boat bailers and any number of other objects. It is the all-purpose wood of the Pacific, used wherever the special toughness and strength of hardwoods are not essential. Usually old trees, large and past bearing, are cut down laboriously for the wood or salvaged when a storm fells them. Frequently the lower part of the trunk is already hollow, simplifying the task of the canoe-builder.

The sago palm is a common source of starch food in Melanesia where, in combination with extensive cultivation of taro and yams, it pushes breadfruit into a minor position. When the sago palm matures, it is cut down, and up to seven hundred pounds of pith are removed from the trunk. After the fibers have been removed, this pith can provide a vast quantity of bland but filling puddings.

Common to nearly all Pacific islands is the coconut palm. Coconuts grow both inland and along the shore, where sea water may lap about their roots with no harm to the tree. Ripe nuts frequently fall in the water where they float away, the hard outer shell watertight until the nut lands on another shore and germinates. Coconuts require no care, Even planting is simple, the sprouted nut being set down on a likely piece of ground with perhaps a little fence to discourage hungry pigs, and then left to root and grow. After six or seven years it begins to bear and will still be bearing when its planter is long dead. The nuts are clustered under the rather tattered-looking crown of green fronds, high up the smooth, curving trunk. The trees bear continuously, with nuts in every stage of development in the clusters. New nuts reach full size in a few months and then mature over a longer period.

The green nuts have a damp, fibrous outer casing which is easily cut to expose the comparatively soft inner shell. This is filled with water which is slightly sweet and surprisingly nutritious. On boat trips of several days, the islanders often bring along nothing but large numbers of green coconuts for both food and drink. On these occasions the nut is cracked open after drinking; then the soft white jelly, which sticks to the inner surface of the shell, is scooped out. It is a refreshing food

As the coconut matures this jelly hardens and thickens to form a firm white meat almost an inch thick, rich in oil. The coconut that is grated on our cakes and desserts is produced at this stage. On the islands it is often grated and squeezed out, yielding a sweet white milk which can make a rich neal when poured over an otherwise bland starch food.

Copra, Basis of Pacific Economy

However, the coconut's primary use is for copra, the big cash crop throughout the Pacific. Copra is the source of coconut oil, used in many products. The ripe nuts are split by slamming them down with great precision on a pointed hardwood stake. The meat is then scooped out with knives, sliced and placed upon racks to dry in the sun. This is usually a family operation, dull and messy but prof

itable. The acrid smell of drying copra is everywhere, a reassuringly familiar aspect of the island scene which one learns to miss with nostalgia after leaving. The drying racks are set up next to little thatched sheds, and a sudden shower sends everyone scurrying to slide the family racks under cover from the rain.

Strong Twine from Coconuts

The water, milk and meat of coconuts only begin the list of uses of this versatile tree. The outer husk of the ripe nuts contains fibers that, when separated, can be twisted into sennit twine of amazing toughness. It is quite impervious to rot from dampness or sea water. Despite the advent of nails and screws, sennit continues to be used widely for lashing together the timbers of houses and the parts of canoes, tools and the like. Expert craftsmen can twist sennit into sizable ropes which, after use, become quite flexible. The hard inner shell of the ripe nut can be cut and carved into ladles, scrapers, combs and cups, and will take a high polish.

Even these various uses do not begin to use up all the husks left over from cutting copra. Small boys take great delight in mounting sticks and bits of coconut frond in the half husks and setting armadas of little boats sailing off with the trade winds over the horizon. The coconut palm can also warm the hearts of adults, for the sap may be tapped from the tip of the young blossom into a cup and fermented in a few days into a pleasant-tasting wine. When fresh, this juice is also excellent food for small babies.

All these different kinds of food that the islands produce, some literally growing on the trees ready for picking, may give the impression that here at last is the land of plenty. On the high islands this is, in a sense, true. Most of the Pacific islands can, and frequently do, produce more than the natives need. But such production is not accomplished without labor.

Even during the breadfruit season there is much work; the trees are tall and often risky to climb. A man has to pick a heavy load and carry it to the village early

enough in the day to finish cooking, pounding and wrapping it before evening lest it spoil. Cooking means collecting firewood and heating stones in a pit, while pounding is long and arduous. Furthermore, breadfruit is in season only a few months of the year. During the other months, food comes from the gardens, which have to be cleared, dug up, planted, weeded and so on, up to the time of harvest when essentially the same kind of work needed to prepare breadfruit begins.

The gardens are usually inland, for near the shore there is more sand than soil. Inland means a long walk, carrying tools, water and often small children, plus a load of produce on the return trip. Inland there are trees which cut off the breeze, and one works for hours under the broiling sun. So, although one can be reasonably sure of eating in return for work, the work is neither light nor quick. Sometimes, of course, prolonged drought or the damage of a storm (or foreigners having a war on the island) can create a real and acute shortage of food, though this is exceptional.

Unless it is to be allowed to ferment, once the food is prepared it must be eaten because in three or four days it will spoil. Since preparing a batch of food is an all-day operation, preceded by the collection

TREASURY BUILDING in Nouméa, New Caledonia. Some transpacific planes stop here.



of firewood and other supplies, frequent preparation could mean an endless round of work. At the same time fishing, gardening, cutting copra, building houses and canoes and any number of other tasks must be kept up. However, it is in food production above all that one leans upon the co-operative efforts of one's kinsmen.

Family Ties among the Islanders

The Pacific islander is born (or sometimes adopted) into a group of people who will be his partners in everyday activities for the rest of his life, with more added when he marries. This group does not by any means include all the persons with whom he recognizes a relationship-who may be scattered over a number of islands -but rather the core of closer kin who usually live fairly near to one another. The membership of this core varies in the different societies and often excludes persons that we would consider close relatives. But however it is made up, it is usually of a size for co-operation in the tasks required by the particular culture. Co-operating is not a matter of choice. The individual co-operates or else finds himself cast upon his own resources in an environment where even Robinson Crusoe needed his man Friday.

The arrangement has many advantages. The matter of preparation of staple foods we have just discussed is one of the most important, for various members of the kin group can take turns preparing food. One household will make enough for the several families comprising the group. Two or three days later another family will make another batch of food, ready when the first has been used up or is on the verge of spoiling, and so on from one household to the next.

Although the distributor of food on a given day is greeted with courteous pleasure and thanks, implying that he is doing a real favor to each of the recipients, if he failed to pass the fruits of his toil around the kin group he would be very ill treated indeed. However, since the donor is assured of a return on his investment in the very near future, it is most unlikely that

he would skimp on a productive house-

hold. The ones who are likely to suffer are the old and the permanent invalids, unable to produce any more. The cooperative kin group theoretically provides perfect social insurance, but unfortunately in time of want the distribution tends to favor those who will make a return. Then the aged and infirm must get along with very little—nor complain lest they be considered cantankerous and find themselves ignored completely.

Actually, although the nonproductive members of the group are in a particularly precarious position and must exercise great restraint, everyone must be careful. Together his kinsmen may make life very hard for the individual who dares to slight the group—unless, of course, social status or rare skills place him in a position of power and immunity.

Little systematic study has been made of the effects on personality development of this constant self-control. It appears that on some groups of islands the natives can allow themselves quite a bit of freedom of expression. Elsewhere the people are much more cautious in revealing their thoughts and feelings. There is a difference between individuals, of course, but also a broader difference between the members of one cultural group and another, though physically they may be quite similar. The natives of Truk have been studied from the psychological standpoint and show rather clearly the limiting effects of having to get along with one's kinsmen. They are worth discussing briefly because something of the same processes are at work on all the Pacific islands (as well as elsewhere in the world) in varying degree.

Dependence on One's Kin

On Truk even the child at play learns to treat his older brother, or sister, with restraint lest he find himself in a squabble with no one to take his side. As he grows older he begins to take an active part in the economic and social life of the community and becomes increasingly aware of his dependence upon his relatives. It is easy to give offense, and he finds that if he has strong feelings the best thing to do is hide them.

THE PACIFIC ISLANDS

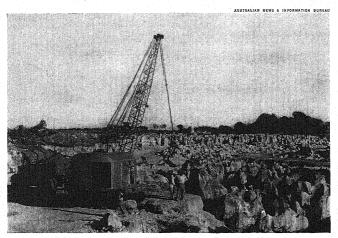
A Westerner coming to these islands finds the natives quick to laugh-or sometimes abruptly sullen-and often easy people with whom to make friends. However, as time goes on and the Westerner seeks real companionship with his newfound friends, he senses a certain superficiality which at home he would call emotional immaturity. He concludes that the islanders are just children at heart. By our standards they are, because, dependent upon the good will of their kinsmen, they cannot permit themselves the luxury of trying to change society, of reprimanding an elder they know to be wrong or even of really loving anyone lest their relatives disapprove and leave them the choice of love or isolation-and hunger. thinking about such things can cause worry, for the thought might slip out in word or deed and bring on trouble. So the best thing to do is just go on from day to day without examining too closely one's own feelings or those of others. The restraint that the Trukese exercise as the

price of security thus becomes a part of their whole way of thinking and makes them superficial in their dealings with others and, in Western terms, emotionally immature.

Nevertheless, even among people like the Trukese and more frequently in other groups, individuals arise who are capable of dedication, initiative and mature wisdom. They may, if they are fortunate, rise to leadership-and the Pacific has seen some brilliant leaders-or they may suffer frustration and the life of social misfits. Employment in the offices of the foreign administrations often provides niches for the latter, where they may escape the restriction of their own society at least part of the time. This is not an easy way out, for they are caught between two cultures and not really full participators in either. Yet such persons frequently play a crucial role, for better or worse, in translating the value and significance of one way of life in terms understandable to the other.

We have digressed in order to describe

PHOSPHATE MINING on Nauru. The phosphate lies among coral formations. After the mineral is removed, the pinnacles of coral remain, looking like the summits of miniature mountains.



the social and psychological setting of island life and must now return to our discussion of everyday life. No meal is complete without some protein. The islanders complain that they cannot get full on taro or yams or breadfruit alone, but with just a little fish to accompany the starch food they are satisfied. On some islands there are a few wild animals-rats, wild pigs, or birds-and there are domesticated pigs and chickens around almost every village. However, these are too precious for routine consumption and are eaten only at feasts, or when the good fortune of the hunt or bad fortune of an accident yields meat that must be eaten before it spoils.

All the Ways of Catching Fish

The tropical seas abound in fish, and the islanders know almost as many ways of catching them as there are kinds of fish. Most fishing is done on or near the coral reefs where little fish congregate to feed on the rich marine life and the larger fish gather to eat the little ones. There are a variety of hand nets used by fishermen standing in the shallow water on the reefs. One of the most spectacular is the throw net, a flat circle of fine-meshed netting once made of fiber from banana or hibiscus bark, now of imported line. It is bound with a heavier line around its edge along which are hung weights at close intervals. A skilled fisherman stands motionless, holding the net suspended from the middle, until he sees a school of fish swimming by. Suddenly he gives the net a twisting throw that carries it over the glittering, multicolored mass. The twist spreads the net out, and it falls on the school so fast that the fish cannot escape; the weights carry the net to the bottom with the fish struggling inside.

Other nets have rigid frames which are held in the hand, ready for a quick dip under a swimming fish. Some of the frames are V-shaped. Carrying one in each hand, women form a line and walk across the reef dipping in their nets and driving schools of fish together as they close in. With their nets rising and falling on each side, the women look like grotesque butterflies working slowly across the reef.

Smaller dip nets are also used to catch small octopus and squid as well as fish. Imported line and skills have permitted the use of long seine nets, with floats on one side and weights on the other. The net is loaded on a canoe and paid out over the side with great haste and excitement, surrounding a large school of fish unlucky enough to have ventured into water sufficiently shallow for the net to reach from surface to bottom and trap them.

Spears are also used on the reefs. They are simple, straight, sharpened shafts, or more complicated with multiple prongs, held in the hand ready for a quick jab at an unwary fish or octopus. The islanders learned early to use glass, obtained from traders, for goggles. They are carved out of wood, and the lenses are sealed in with pitch made of breadfruit sap. Wearing such goggles, the fishermen swim below the surface, spear in hand, and search out fish lurking in spaces between the coral clusters. It takes long practice to locate the immobile fish, which often match the colors of the coral, and even more skill to hit them with a thrust through the water -to say nothing of keeping oneself from bobbing up to the surface at just the wrong moment. The task has been simplified by the introduction of small metal spears propelled from shafts by rubber bands, usually cut from inner tubes, although if one misses the fish the spear may shoot some distance and he very hard to find again.

Fishing in the Dark o' the Moon

On a moonless night fish will often rise to an artificial light, and the islanders exploit this habit by using torches made of dried coconut fronds. Individuals walk along the reef, holding a torch in one hand and spear or dip net in the other. Or a group swims out with spears and goggles while one man sits in a canoe kindling and holding torches. The sight of nearby reefs and others across the lagoon picked out by pinpoints of red light on a dark night is dramatic and somehow reassuring, for torch fishing is done only in calm weather with wind and sea in a moderate mood. Skin diving in shallow water at night is not a comfortable occupation. Al-



FERDINAND MAGELLAN sailed into palm-studded Umatac Cove on Guam in 1521. This largest island of the Marianas was then the home of a proud, warlike people called Chamorros.

though both water and air are at fairly warm temperatures, one can become extraordinarily chilled bobbing under water and up again into the breeze of the trade winds. When a lot of people are out torch fishing, someone usually builds a roaring fire on the beach. One could ask little more than to sit around such a fire, roasting fresh-caught butterfish in the coals and eating them tender and juicy with one's fingers while the fishermen warm themselves at the fire and sing old songs and new, and palm fronds weave back and forth in the flickering firelight. There are times like this in the Pacific when only the most determined cynic could deny the beauty and romance of the islands.

Fishing in deeper water is usually done by trolling, formerly (and in some areas still) from sailing canoes. Lures are still often made of shell, but the old fiber lines and ingenious bone hooks and tackles have been replaced by imported goods. Trolling is done close to the reefs, inside or outside the lagoon. Deep-sea fishing with long lines suspended from glass buoys is largely a monopoly of the boats that sail out of Japan.

Sailing canoes are still in widespread use in the Caroline Islands, from Truk westward. These boats, which are used

for long voyages as well as for fishing, are very seaworthy, strong and efficient. They have an outrigger float on one side and a platform on the opposite side which both provides stowage space and permits the crew to balance the outrigger. Although the outrigger does keep the boat from tipping over through its buoyancy when at rest, with the canoe under sail the float is held up by a combination of wind pressure on the sail and the weight of the crew on the platform. Then the float barely skims the water, with a minimum of resistance. This requires an agile crew and a skilled captain but makes for high efficiency. The hull is a narrow V in cross section, tapering to a sharp point at each end. The steep sides make a keel unnecessary and the hull shape acts something like an airplane wing, exerting a positive force to hold the boat from drifting downwind. On some islands the hull is even curved slightly away from the outrigger side, increasing the "lift" and at the same time compensating for the drag of the outrigger. This is pretty advanced engineering.

Canoe builders are craftsmen of a high order, carving as much as they can out of a breadfruit trunk and then building up the sides with breadfruit planks fitted so accurately that caulking is scarcely necessary. The planks are fastened together with lashings of sennit twine, countersunk into the wood and covered with a mixture of clay and breadfruit gum to make an absolutely smooth exterior. The canoes are propelled by triangular lateen sails, with imported canvas effecting a great improvement over the old pandanus matting.

Expert Seamanship on Sailing Craft

Because the outrigger must always be on the windward side, tacking means reversing the direction of travel of the boat and therefore shifting the entire sail and rigging from one end to the other. This is quite a feat, in which each man must know his job and do it with speed and precision. To the uninitiated, however, the operation looks like a wild melee in which everyone will be lucky to keep from falling overboard, much less get the sail and mast shifted. Yet in a jiffy the operation is completed and the boat moves off on a new tack. These are magnificent boats, not designed for amateurs. Their only drawback, and it is an important one with so much dependent upon copra, is that they will not keep either cargo or passengers dry if there is much wind-and copra is ruined by a little wetting. Sailing canoes are still being built, but only by those who cannot yet afford or obtain a roomier and drier Western-style boat. A few are also built just for fishing, in which they are still unexcelled.

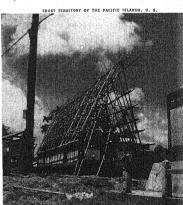
Long over-water voyages in canoes have been the most dramatic of the many romantic facets of life in the Pacific ever since the islands were originally populated by this means. In Polynesia such trips were made by paddling, often in double canoes—two hulls lashed together to provide size and stability. Only in Micronesia were sailing canoes sufficiently advanced in design to permit holding a true course under sail over long distances. These voyages still take place in the Carolines in the canoes we have just described.

Seeing a canoe twenty-five feet or so long set out with eight or ten people perched on its narrow hull to brave the Pacific deep seems almost incredible, the more so as they all appear quite uncon-

cerned over the perils ahead. It becomes even more incredible when one sees their destination-a little bit of land, perhaps a mile long, rising above the horizon only to the height of its breadfruit trees, possibly a hundred feet. Even from the bridge of a ship it can be seen only ten or twelve miles away. Yet the Micronesian navigators hit their mark every time-unless thrown way off course by calm or a storm -without compass or any device other than a trained eye and a skilled hand on the steering paddle. Basically they steer by the stars, their training including a long course on the position of the rise and fall of a large number of stars through the

There are, however, a variety of secondary aids. The trade winds, during whose season most voyages are undertaken, vary only slightly in their direction over a period of days. On a dark night the steersman listens to the sound of the waves lapping on the hull; a change in course changes the sound, and he corrects. Once one of these old navigators was lying on a bunk below decks on a trading schooner through the night. In the morn-

AN ABAI (men's house), with a high peaked roof, is erected in the Palau group, Carolines.



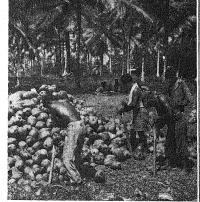
ing he could tell the skipper their exact position just from having listened to the sounds coming through the hull.

Most species of sea birds spend little time wandering about the open ocean. Rather, they fly directly from one island to the next and thus provide assurance to the navigator that he is on course. Bits of plants and other debris float away from islands and can provide a heading when they are seen. This is especially likely after a storm, a time when the navigator is equally likely to be seeking a clue to the nearest land. Even tiny islands change the pattern of the waves enough to be detected by a trained eye miles away. These and other techniques permit the steering of a remarkably true course and the locating of land when it is still well out of sight. But no way has yet been devised by

Micronesians or Europeans for finding one's location when really lost unless one has available the paraphernalia of European navigation: compass, sextant, charts, star tables and, above all, a chronometer to tell time. Some day these refinements will perhaps be available. Until then navigation will continue as it has from time immemorial, helped along by prayers to God and spells to ward off evil spirits.

Christianity in the Islands

The prayers to God are real and sincere for all that they are intermingled with the placation of sea spirits and ghosts of ancestors. Christian missionaries, both Catholic and Protestant, have been in the area for varying lengths of time. Practically every island in the Pacific has been familiar with them since about 1900, and in some cases far longer. Most islanders are Christians, although naturally varying widely in both their dedication and their understanding of their religion. The old native beliefs were concerned primarily with coping with the anxieties created by illness and the dangers of a strenuous life, often at the mercy of the vagaries of nature. The anxieties remain and it is not surprising that rituals directed toward reducing special local hazards-whether real or imaginary-should persist as extra insurance along with prayers to God. Most



TRUST TERRITORY OF THE PACIFIC ISLANDS, U. S.

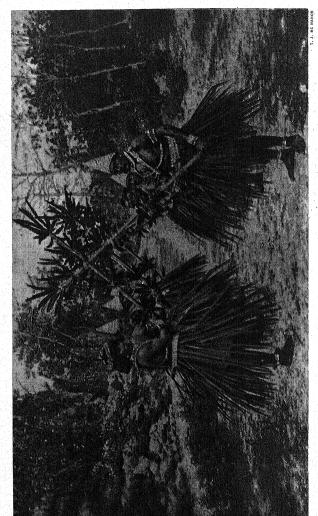
SLAMMING COCONUTS on pointed sticks to split the nuts. The meat is then scooped out.

missionaries wisely concentrate their principal energies on the teaching of Christianity rather than on the rooting out of old beliefs, confident that as faith and understanding of an all-powerful God grow, the local spirits will recede and disappear. This does in fact seem to be happening,

slowly but steadily.

Christianity is part of the new way of life that is coming to the islands. Like all new things, it has in practice its good and bad aspects. Earlier missionaries seemed bent on enforcing the appearance of morality and worship ahead of anything else. All these island peoples had their own rather rigid standards of modesty which all too often were swept aside in favor of our own. A white muslin Mother Hubbard dress became rather more important than love for one's neighbor. The resources of whole islands were strained to build massive churches big enough for twice the available population, on the premise that God's house must be bigger and better than any other. These structures have saved many lives in storms. However, the current view is that the teachings of Christ are more important than the building in which He resides and is worshiped.

Quite aside from the spiritual help the



OCEAN ISLAND is one of the Gilbert group, which lies across the equator and together with the Elice Islands forms a colony under the rule of Great Britain. Like all South Sea islanders, the inhabitants love to dance. Here their wide skirts, put on especially for the ceremony, are

of palm leaves and their sugar-loaf hats of plaited grass, while feathers decorate their wands. The island—only six miles around—is yet a valuable possession because of the plaosphate of lime it exports. This mineral is widely used as fertilizer for crops.





TAPA AND KAVA are two native names connected with industries peculiar to many of the islands of the Pacific. Tapa is a cloth made from the bark of the paper mulberry, and in the upper photograph we see it being beaten out on wooden blocks. Kava is a favorite drink made from the roet of a pepper plant which these women are shredding.

THE PACIFIC ISLANDS

islanders receive, there can be little question but that Christian values, even when imperfectly understood, have been increasingly adopted. In the process they have eased the constructive adjustment of the natives to their role in the complex life of the outer world.

By and large, the adjustment is proceeding well. In fact, despite the blending of old and new, the islanders' moral values often appear more consistent than those of their administrators—who have outlawed warfare and then fight their own wars on a scale never conceived of on the islands before, or who preach brotherly love and then almost universally treat the natives on a segregated basis. The administrators are captives of their own culture which is far from perfect.

The biggest problems are economic. The islanders have seen the glitter of plenty and want some for themselves—or at least good boats and shoes and houses with solid walls and roofs instead of thatching or the ever present rusty iron. They are willing to work for these things, but there are not very many ways of making money to buy what they want. They can produce copra, on some islands handicrafts and on a few sugar cane. Fiji, which produces a lot of sugar, is slowly

WING GILLOWAY

FROM SHELLS of many colors and grasses, artisans of Guam fashion attractive handbags.

being engulfed by the prolific Indian labor imported to work the plantations. But the islands are mostly small and must compete with other producers who can operate on a larger scale.

Big operations above all mean big cargoes for ships without delays and extra traveling. The copra produced on many of the islands, for example, is sun-dried and of premium quality, yet produced at a comparatively low cost. But even a group of islands pooling their output cannot fill an ocean-going freighter calling every six months (which is about as long as copra can be stored in the tropics without spoiling). Even if they could, loading the copra largely by hand would take days. Another ship can travel the extra thousand or two miles to Manila (if it is coming from North America), unload a full cargo of manufactured goods one day, load lower-grade, oven-dried copra from dockside conveyers the next and be back in port while its sister is still tramping from island to island trying to fill its holds. If it is the season of hurricanes or typhoons. the hazards of lying in reef-studded harbors make the operation even less attrac-The dilemma of transportation makes almost certain the continued dependence of the islands upon foreign sponsors for many years to come.

Whether or not the islanders recognize these economic facts, one seldom hears echoed in the Pacific the cries for independence that ring out from other undeveloped parts of the world. This is undoubtedly fortunate. Although the administering powers may sometimes be misguided in their paternalism, it is clear that they keep out more harm than they bring in. The early record of profiteering traders, greedy ships' crews and disregard for the natives' interests-with the vanished Hawaiians providing mute testimony for the last-could readily be repeated in new form were the islanders left to fend for themselves. As it is, the islands have many problems, but few of them thus far are overwhelming. The romance and beauty of the island way of life is changing, but it is not being destroyed.

By THOMAS GLADWIN

THE PACIFIC ISLANDS

PACIFIC ISLANDS: FACTS AND FIGURES

GREAT BRITAIN Fiji Islands

About 250 islands (about 80 inhabited) in Melanesia. Total area, 7,056 sq. mi.; population, about 320,000. Colony administered by a governor, assisted by an executive and a legislative council. Exports sugar, gold, copra and other coconut products. Capital, Suva.

Tonga (Friendly) Islands

Three groups in Polynesia; area about 269 sq. mi.; population, 51,000. Self-governing British protectorate; monarch and legislative assembly. Exports copra. Capital, Nukualofa.

Gilbert and Ellice Islands Colony

Coral islands in Micronesia; total area, 375 sq. mi; population, 38,000. Includes Gilbert, El-lice, Ocean, Phoenix and Line islands. Governed by resident commissioner at Tarawa in the Gilberts. Canton and Enderbury in Phoenix group controlled jointly by Britain and U. S. Exports coppra and phosphate.

British Solomon Islands Protectorate

In Melanesia; includes Choiseul, Guadalcanal, Malaita, New Georgia, Ontong Java, Rennell, San Cristobal, Santa Cruz, Santa Isabel, Savo, Shortland islands. Area, 11,500 sq. mi.; population, about 100,000. Governed by a high commissioner. Exports copra, trochus shell and gold. Capital, Honiara.

Pitcairn Island Colony

Includes Henderson, Ducie and Oeno islands (uninhabited). Pitcairn Island alone, area, 2 sq. mi.; population, 125. Administered by governor of Fiji through an elected council.

New Hebrides Condominium

In Melanesia. Main islands: Espiritu Santo, Malekula, Ambrym, Epi, Efate, Erromanga and Tanna; total area, 5,700 sq. mi.; population, 52,000. Governed jointly by British and French. Exports copra, cacao, coffee. Capital, Vila, on Efate.

Starbuck, Malden, Flint, Caroline and Vostock

Islands between 150° 14' and 155° 52' W. longitude.

AUSTRALIA (see also New Guinea)

Norfolk Island, 930 mi. northeast of Sydney; area, 13 sq. mi.; population, 1,200; Terrilory of Askmore and Cartier Islands; Cocos (or Keeling) Islands, 800 mi. southwest of Singapore; area, 1.5 sq. mi.

NEW ZEALAND Cook Islands

In Polynesia. Main islands: Rarotonga, Atiutaki, Mangaia, Atiu. Area, 84 sq. mi; population, 15,600. Governed by resident commissioner and legislative council. Exports citrus fruits, mother-of-pearl, copra. Niue (Savage) Island

In Cook group but administered separately. Area, 100 sq. mi.; population, 4,700. Copra.

Tokelau (Union) Islands

In Polynesia. Atafu, Nukunono and Fakaofo atolls 300 mi. north of Western Samoa. Area, 4 sq. mi.; population, 1,800.

FRANCE

New Caledonia and Dependencies

Overseas territory including New Caledonia, Loyalty Islands, Isle of Pines, Wallis Archipelago, Futuma and Alofi. In Melanesia. Total area, 9,401 sq. mi.; population, 55,500. Governed by high commissioner assisted by a privy council and council general. Industries: farming, mining, manufacturing. Produces nickel, chromium, coffee, copra. Nouméa, capital, 10,500.

French Establishments in Oceania

Scattered islands in Polynesia administered by a sovernor, privy council and representative assembly. Includes Society Islands (largest, Tahiti, Moorea), Marquesas, Tuamotu, Leeward, Tubuai (Austral) groups; Rapa; Gambier Islands. Area, 1,520 sq. mi.; population, 55,700. Exports copra, phosphate, mother-of-pearl, tropical fruits. Papeete, capital, on Tahiti, 12,400.

UNITED STATES (see also Hawaiian Islands)

American Samoa

In Polynesia. Includes Tutuila, Aunuu, 3 islands in Manua group and Swains and Rose islands. Area, 76 sq. mi.; population, 18,000. Administered by a civil governor under Department of the Interior. Sons of chiefs are trained at the Feleti School. Chief town, Pago Pago.

Guan

In Micronesia, in the Marianas Archipelago. Unincorporated territory, administered by a governor and a unicameral legislature responsible to Department of the Interior. Total area, 225 sq. mi.; population, 59,500. Capital, Agaña. Apra Harbor is the only good port.

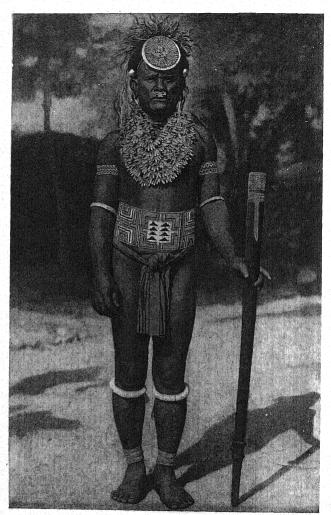
UNITED NATIONS TRUSTEESHIPS

Nuvru, south of equator, 2,200 mi. northeast of Sydney. Area, 8 sq. mi.; population, 3,200. Trusteeship held jointly by Britain, Australia and New Zealand, administered by Australia. Produces phosphate.

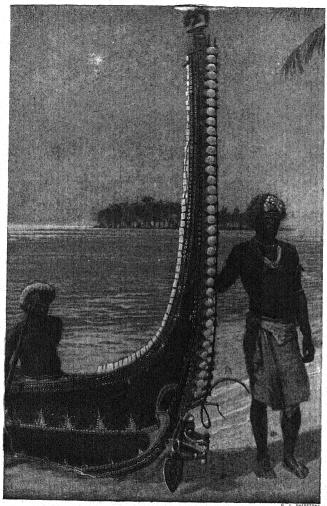
Western Samoa, includes Savaii, Upolu, Manono and Apolima islands. Administered by New Zealand with a council of state and a legislative assembly. Area, 1,130 sq. mi.; population, 92,000. Exports copra, cacao, bananas. Chief town, Apia, on Upolu.

Caroline, Marianas and Marshall groups, in Micronesia. Area, 829.7 sq. mi.; population, 58,000. Administered by the U. S. Produce cot-

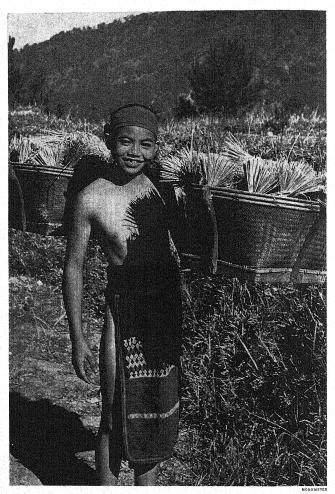
ton, copra.



AN ISLAND CHIEF in the Solomons wears with pride a necklace of porpoise, shark and dog teeth and upon his head a polished disk of tortoise shell. Arm bands and belt have colorful designs.



SOLOMON ISLANDERS decorate their high-prowed war canoes with iridescent mother-ofpearl and cowry shells. The carved figurehead at the top is designed to ward off danger.



AN IGOROT BOY, laden with baskets of rice straw, greets the world with a happy smile. The Igorots originally came from Indonesia and live mostly in the mountains of Luzon.

The Philippines and the Filipinos

Fringing the southeastern rim of China is a broken rosary of 7,100 islands called the Philippines. They were named for Prince Philip (later King Philip II) of Spain by the ill-starred navigator Villalobos, in 1543. The group is one of the richest offshore archipelagos of Asia, being dowered by God with a fabulously fertile soil, a healthful tropical climate, vast mineral resources, a great variety of animals and plants, and unique wonders of nature. So it is that in song and story the lovely islands are often poetically compared to the lustrous gems yielded by the sea and called the "Pearls of the Orient".

IKE a pendulum a thousand miles long, the Philippine Islands swing down through the Pacific from Formosa to Borneo. With a total area of 115,707 square miles, they have as much land surface as Great Britain and twice as much as Greece. The largest island, Luzon, is almost the size of Newfoundland. Mindanao, the second largest island, is as big as Indiana.

The whole coastline of the archipelago, with its myriad bays and gulfs, is longer than that of the United States. There are lovely coves and excellent natural harbors. Mountains ridge the islands, and there are countless rivers and lakes in the vales between the ranges. Highest of the peaks is Mount Apo, 9,610 feet, a dormant volcano in Mindanao. And, incidentally, one of the greatest ocean depths, the Philippine (or Mindanao) Deep, is on the eastern margin of the Philippines. Extending 35,400 feet below sea level, it would more than submerge Mount Everest, the world's highest mountain.

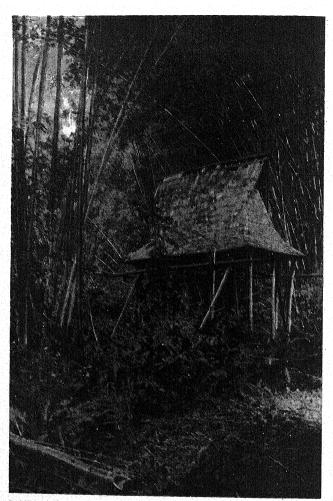
Considering the productive soil, Dr. F. C. Carpenter, well-known American, traveler-writer, has said that the Philippines are "among the richest lands on earth." The Filipinos are basically an agricultural people. About 80 per cent of them live by farming. The greatest crop is rice, the people's staple food. The central plain of Luzon, in fact, is considered the "rice granary of the Philippines" and one of Asia's rice bowls. North of this plain is the Cagayan Valley, the greatest tobacco-producing area in Asia and the source of the famous Manila

cigar. The Bicol Peninsula in Luzon and Davao Province in Mindanao are the world's most important hemp-producing regions, supplying the renowned Manila hemp. On the cool, breezy plateaus of Benguet (in Luzon) and Bukidnon (in Mindanao) some temperate-zone products, such as apples, apricots, California oranges, grapes, pears and spinach, are cultivated with notable success.

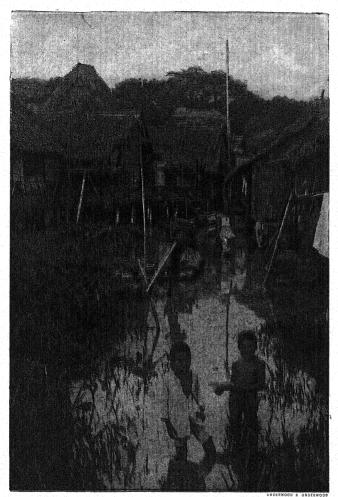
Among the countries of the world, the Philippines today ranks first in hemp and coconut production, second in sugar cane, fourth in lumber and seventh in tobacco.

Practically all minerals known to man are found in the Philippines. Mining is one of the ancient industries of the Filipinos. It was flourishing even before Europeans first came to the Far East. More gold is produced than in any other country in southeast Asia. The iron-ore resources of Mindanao are estimated at one billion tons and are regarded as "one of the richest undeveloped deposits in the world." In the island of Leyte (where General MacArthur made his historic landing on October 20, 1944) there is a wealth of asphalt-some ten billion metric tons, more than enough to asphalt all the roads of Asia. Other minerals, such as silver, copper, oil, manganese, cement, coal, chromite and tin, are also found in abundance.

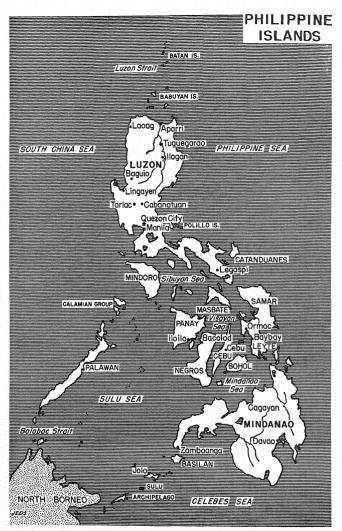
More than half the land is covered with forests, which are capable of producing about one-half billion board feet of timber. No less than three thousand species of trees are found in Philippine forests. Most famous of these is the narra



BAMBOO is the most useful grass. It is of many kinds; some varieties grow to be thirty or more feet high. Of it a Filipino can build a comfortable house from foundation to ridge—posts, stairway, floor, partitions, windows, rafters, roof. The roof of a bamboo house is usually, though not always, built of the leaves of the nipa palm or of reeds.



HOUSES ON PILES are the usual thing in the Philippines, for they are more sanitary and, in times of high water, essential to comfort. These houses are dry although the river has overflowed the site of the village. Many of the houses in the hills also stand on piles, high above the ground, following the old custom. Elsewhere there are more modern dwellings.



(Pterocarpus indicus), known the world over as "Philippine mahogany." It is the national tree of the Philippines, symbolizing the Filipino traits of endurance and sturdiness.

No other archipelago in the world contains such plant wealth as does the Philippines. According to botanists, there are ten thousand species of ferns and flowering plants in the country. The queen of the Philippine flowers, and the national flower, is the sampaguita (Jasminum sambac). It is a tiny, snow-white, starshaped blossom with a tenderly lingering fragrance. To the Filipinos, it is a symbol of love, youth and friendship. Many love songs have been woven around the sampaguita, which may be heard on a moonlit evening. Then haranistas (serenaders) sing them to the accompaniment of a throbbing guitar.

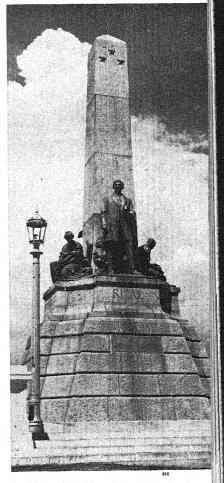
Charming Flower Customs

Dark-eyed dalagas (young women) often tuck these flowers in their soft black hair or wear them as a lei around their lovely necks. According to Filipino tradition, a binata (young man) who is too timid to express his love to a girl may send her a sampaguita garland, especially on the eve of a dance. If she wears it, he has reason to hope; but if she wears it not, he had better look for another sweetheart.

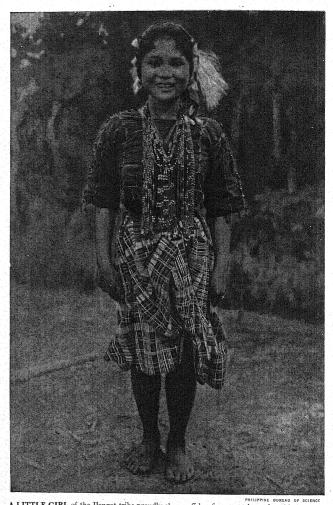
Visitors to the islands often are welcomed with sampaguita leis as an expression of friendship and hospitality. But when a native girl wears a sampaguita lei, it is considered a sign that she is a genuine Filipina.

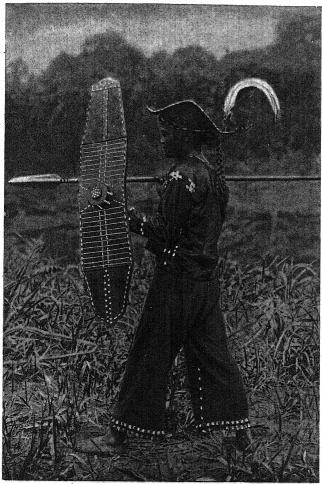
Other floral beauties of the Philippines are the radiant cadena de amor (chain of love), the intriguing dama de noche (lady of the night), the flaming dapdap (fire tree), the fragrant camuning, the queenly camia and the odoriferous ylang-ylang.

According to botanical authorities, the Philippines have the richest collection of orchids in the world, reaching nearly one thousand species. Many Philippine orchids are extremely rare and are never found in other countries. Of all the



MONUMENT TO JOSE RIZAL, Manila. He tried to overthrow Spanish rule in 1896.





PHILIPPINE BUREAU OF SCIENCE

MANDAYA WARRIOR of the island of Mindanao. The Mandayas are a pagan tribe, once extremely warlike, who still keep very much to themselves. Several families may live in a single dwelling that is built high in trees. Among their crafts is the making of beautifully patterned cloth. The design is produced either by a tie-dyeing method or by embroidery.

orchids, the waling-waling (Vanda sanderiana) is unsurpassed in loveliness and grace. It was discovered in 1881, blooming wild in the jungles of Mindanao.

The Philippines teem with an abundance of animal life. There are 750 species of birds in the archipelago, more than the number in Australia, China, Japan, Indonesia or Hawaii. The insect population is vast, with some 25,000 species. Of special interest to scientists are 3 Philippine animals—the mouse deer, the smallest deer known; the tarsier, the smallest monkey in the world; and the tamaraw, a unique animal that looks like a dwarf buffalo and is found only in the islands.

Because of its usefulness, the ponderous, powerful carabao (water buffalo) is the favorite animal of the Filipinos. It draws the plow in the rice paddies, pulls carretons (bull-carts) and drags logs. Its meat and milk are the farmers' food, and its tough hide is highly prized as leather. Even the animal's horns are carved into decorative household fixtures and used for the handles of bolos (chopping knives).

A favorite sport in the barrios (villages) during the annual fiestas is the

carabao fight or carabao race. A carabao is ordinarily a patient and well-behaved animal. But, when roused to anger, it can gallop as furiously as a stampeded Texas longhorn or fight like a Bengal

Anglers of all nations consider the Philippines a fisherman's paradise, Lakes, rivers and surrounding seas abound with more than two thousand kinds of fish. Manila Bay, Pangasinan's Lingayen Gulf, Laguna de Bay and Palawan's Malampaya Sound are excellent fishing grounds. Most delicious of the Philippine fishes, according to gourmets, is the lapu-lapu, whose flavor is

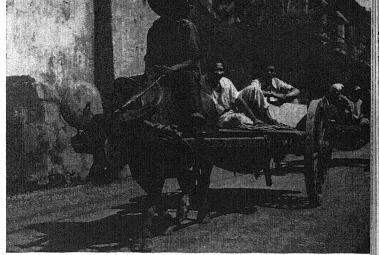
worthy of a king's palate.

It is no "fish story" that the largest and smallest fish in the world are found in Manila Bay. The manmoth Rhineodon typus is more than fifty feet long and is called pating bulik (striped whale) by Filipino fishermen. The tiny Pandaka pygmaea is 11.5 millimeters—less than a half inch—long. This is about three millimeters smaller than the sinarapan (Mistichthys luzonensis) of Lake Buhi, Camarines Sur (southeast Luzon province), which authorities once believed to be the world's smallest fish.



EWING GALLOWAY

MANILA HEMP, in bundles and hanks, awaits shipment. The fibers are obtained from the stalks of abaca plants, which are stripped. Manila hemp is made into rope and twine.



AMERICAN PRESIDENT LINES

CARABAO CARTS amble leisurely along a road near Manila. The carabao, or water buffalo, is a useful draft animal. With its splay feet, it can wade through swamps easily.

Everywhere one looks in the lovely islands, there are breath-taking vistas: towering mountains; mist-capped volcanoes canopied by azure skies; rolling valleys carpeted with coconut groves, or fields of rice, sugar cane, tobacco; meandering rivers bordered by swaying bamboos and flowering plants; foaming waterfalls; sparkling lakes; sandy beaches awash with the eternal surge of the tides; and sapphire seas dancing to the rhythm of Oriental breezes.

A two-hour drive south from Manila takes the visitor past the century-old Bamboo Organ of Las Piñas, the only organ of its kind in the world; the quaint lake-shore town of Calamba, birthplace of Jose Rizal, national hero of the Philippines; and the hot springs of Los Baños, one of Asia's famous spas. The goal of this trip is the two-hundred-foot-high Pagsanjan Falls.

In southeast Luzon is Mount Mayon, the only volcano on earth with a perfect cone. The best time to see it is at sunrise when its brooding summit is garlanded with gossamer mists and its graceful slopes scintillate in dark green and pale gold.

About 180 miles north of Manila is the beautiful, cool, pine-clad city of Baguio, famous summer resort of the Philippines. Nestling on a scenic plateau, 5,000 feet above sea level, the town has a temperate climate, its bracing mountain air scented with the aroma of moss, pines and straw-berries. In March and April, thousands of people trek up to Baguio to escape the lowland heat and to enjoy the mountain breezes and romantic vistas. Going by car, one has the added thrill of a zigzag road.

Not far from Baguio are the worldrenowned Ifugao rice terraces, which were built two thousand years ago on the massive slopes of the high Sierras by the ancient Ifugaos. The terraces are a marvelous feat of engineering, as amazing as the Inca temples of Peru and as colossal as the Pyramids of Egypt. They are



A MARKED DEPARTURE from traditional religious architecture is evident in this modern church of the Philippines. Even the mosaic holy figures are modern in form and dress.

a soul-inspiring sight, for they rise like a giant's staircase into the clouds. If placed end to end, they would extend over twelve thousand miles, enough to embrace one half the earth's circumference.

It is said that the sunsets that flame over Manila Bay are without peer in any part of the world. At twilight the Luneta esplanade along the shore of the bay is thronged with people who come simply to see the magnificent display. As the sun sinks toward the horizon, the western sky is a blazing banner of scarlet, crimson, yellow, purple, and the rippling waters below seem liquid gold. Floating on the air comes the sound of church bells tolling the Angelus. Then, as night approaches, over the distant skyline of Cavite looms what appears to be the silhouette of a woman reclining on rocks. According to Filipino legend, this is the figure of a beautiful woman of long ago. Every twilight she waits for her lover, the sun god, who always returns to her after his day's journey across the sky.

Manila is one of Asia's great cities. It was once the Mohammedan kingdom of a Rajah Soliman, a dashing Filipino warrior-king. In 1571 it was captured by the Spanish conquistador Legazpi, who rebuilt it and made it a Christian city.

Manila Bay is the finest harbor in the Far East. At its entrance, standing like a lone sentinel, is the rocky island-fortress of Corregidor. Opposite this island to the east, just across a narrow strip of water, is the peninsula of Bataan. Here, during World War II, the Filipino-American forces made a gallant stand against Japan's invading hordes, upsetting the enemy timetable and thus probably saving Australia.

Manila is a gay, hospitable metropolis, where East and West meet and blend in picturesque harmony. Wafted on the soft moist air of the tropics are the blended aromas of Malaysia, Europe and America. Along asphalt streets and ce-

ment boulevards, past modern office buildings, flash streamlined cars and taxis.

Near the historic Luneta-today a large park-where many Filipino heroes died at the hands of Spain's executioners, are the ruins of Intramuros. Once upon a time this section of present-day Manila was a medieval Spanish city. Within its walls were the massive Manila Cathedral, the imposing Ayuntamiento (city hall), a number of handsome church buildings, schools and colleges, and monasteries of various religious orders. Fort Santiago formed the oldest portion of the walls, and there were drawbridges and an ancient moat. Now Intramuros is a huge pile of charred ruins, a woeful memento of the second World War. A stone's throw from the crumpled walls stands an elegant classic structure, the Capitol. This is where the Congress of the Philippines holds its sessions. It is one of the beautiful buildings that have arisen over the ashes left by war.

Manila's Busy Shopping Center

Across the Pasig River from the Intramuros ruins is the Escolta, the famous business thoroughfare of Manila. On either side are banks, soda fountains, movie houses, office buildings, cigar-and-magazine stands. In the department stores one can buy anything from American lipsticks to Parisian gowns. At night the Escolta is bright with colorful billboards that advertise automobiles and soft drinks, in neon lights.

The streets of Manila present a daily cavalcade of people of all nations: swarthy, bearded, sad-eyed Indian peddlers; chocolate-hued, sarong-draped, fezwearing Mohammedans from Indonesia; brown-complexioned, slender, carefree yellow-hued, almond-eyed, Filipinos; ubiquitous Chinese tradesmen; Negro sailors; dark-eyed Spanish señoritas; blond French mademoiselles; mustached German scientists; dapper Italian artists; aristocratic English bankers, blue-eyed Irish missionaries; pink-cheeked Swiss girls; and sun-tanned American oldtimers. To some, the city is home.

Manila is a city of universities, a fact in which the Filipinos take great pride. There are twelve universities within Manila's territorial limits. No other city on earth, not even New York or London, has so many. The oldest of the Manila universities is the University of Santo Tomas (founded in 1616), which is 25 years older than Harvard University. The biggest is Far Eastern University (founded in 1033), whose total enrollment of 21,000 makes it the largest of any university in Asia.

One of the historic landmarks in Manila is the palatial Malacañang. In earlier days it was the residence of Spanish governors and then of American governors general. Today it is the official residence of the president of the Philippines. It is on the north bank of the Pasig and is surrounded by spacious gardens and shady tropical trees. Anyone, from barefooted farmer to distinguished diplomat is welcome to enter the Malacañang grounds.

To know the Philippines, one must also visit the other islands, their cities and towns. A leisurely trip by steamer during the summer is a delightful experience, for then the seas are calm and smooth, the days sunny and the nights starry. One can see the famous hemp plantations of



UNATION

A READING CENTER, for workers and their children, in an industrial suburb of Manila.

Luzon basking within the shadow of Mount Mayon; the romantic Strait of San Juanico, between Samar and Leyte islands, which is reputed to be the narrowest strait in the world; rustic fishing villages dotting the island shores; the lonely islet of Limasawa, where the first Christian Mass on Philippine soil was celebrated by a priest with the Magellan expedition, on Easter Sunday, March 31, 1521; historic Cebu, the oldest city in the Philippines (founded by Legazpi in 1565) and charmingly called the "Empire City of the Visayas"; fascinating Iloilo, the "Queen City of the South"; opulent Bacolod, the "Sugar City of the Philippines"; gay Davao, the "Hemp Metropolis of the South"; fabulous Jolo, ancient capital of the Moslem Sultanate of Sulu; and colorful Zamboanga, the "Pearl of the Southern Seas."

Nowhere else in Asia are white people welcomed with as sincere friendship and warm hospitality as in the Philippines. The Filipinos, unlike many other Asiatic nations, cherish no bitter memories of Western exploitation. To Spain, which ruled their country for over three centuries, they are eternally grateful for their Christian religion, their Spanish language and literature and their social customs. To the United States, which tutored them for four decades, they also have a lasting affection because of the invaluable things they now enjoy-democracy, popular education, the English language, and the American way of life.

Links with Western Civilization

Of all the Asiatic peoples, the Filipinos have the unique distinction of being well understood by Westerners and decidedly misunderstood by their Eastern brothers. There are several reasons for this. For one thing, the Filipinos are the only Christian nation in the Far East. They are also the only Asiatic people to have absorbed Western civilization to any high degree. Moreover, they form the only English-speaking nation in all Asia, and they are the most Americanized people in the Asiatic world.

More than 90 per cent of the Philip-

pine people are Christians. Of these Christian Filipinos, more than 80 per cent are Catholics. A Filipino is, by nature, religious. The pageantry of the Church rituals and its colorful fiestas satisfy something in his spirit.

Every barrio (village), town and city in the Philippines has its own patron saint, whose feast day is celebrated with pomp and ceremony. Since there are 25 cities, 1,000 towns and 18,000 barrios in the archipelago, it must be apparent that there are thousands of fiestas during the year. Indeed, no day passes without a fiesta somewhere in the Philippines.

Open House during Fiestas

The Filipinos are at their happiest mood during a fiesta. To them, it means a relaxation from the monotony of farm or factory labor, a time to laugh, to dance, to make merry. Many of their most picturesque customs center around the fiestas. During the town fiesta, for instance, every house is practically a public restaurant. Everybody, native or foreigner, is welcome; and an unwritten law of Filipino hospitality dictates that a visitor must eat in every house at which he stops.

At fiesta time, the wealthier citizens give dances in their homes for young people. Adding to the joyous clamor of the day, the streets echo with the thunderous blare of brass bands or to gay tunes of musikong buho (musicians using bamboo musical instruments). There is sure to be a pintakasi (cock fight) somewhere for the older people. But when the Angelus sounds, which closes the religious ceremonies of the fiesta, a solemn and impressive procession winds around the town. Thousands of devotees march slowly, carrying lighted candles. Trailing them is a carriage bearing the image of the patron saint, accompanied by the town priest, prominent citizens and the brass bands. After the procession come the fireworks and the traditional moro-moro. a blood-and-thunder drama staged at the town plaza. The moro-moro re-enacts the old wars between the Christians and the Mohammedans (Moros),

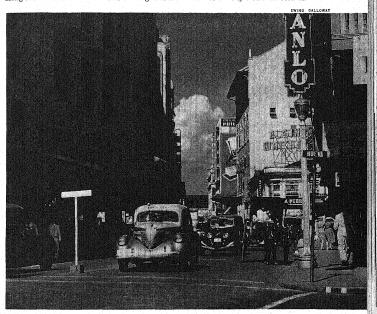
Children quickly find their way to the feria (fair), set up around the church. There are choviros (merry-go-rounds), Ferris wheels, shooting galleries and all the other delights of a carnival.

During a fiesta the Filipino farmer, who goes barefooted the rest of the year, wears shoes and puts on his best barong tagalog (the national costume for men). It is generally made of pina cloth (from pineapple fiber), a silklike material that is soft and translucent. In cut, it looks like a sports shirt except that it has a starched collar, embroidered shirt panel and long sleeves with cuffs. It is worn outside the trousers. Men of the wealthy and middle-class families wear a barona tagalog.

of finer and costlier materials, notably ramie, with genuine pearls or diamonds as buttons, and gold cuff links.

The gala dress for country women, the balintawak, is equally distinctive. It is a two-piece dress consisting of a camisa (upper part) and a saya (lower part). The camisa is made of sinamay (hemp fiber) dyed in gorgeous colors, with ruffled faulike pieces which fit over the shoulders like butterfly wings. The saya is a colored cotton skirt, reaching to the feet. To complete the costume, the woman carries a folded scarf on her shoulder and wears a pair of beautifully carved bakya (wooden clogs) or fancifully embroidered sapatilla (slippers).

AN ICE-CREAM SODA, a Swiss watch, a Paris gown—you can buy almost anything in the shops along the Escolta in Manila. The thoroughfare is the heart of the city's business section.



Well-to-do Filipino women also wear, aside from the balintawak, another national costume, the mestiza terno (halfbreed dress). It shows Spanish influence and is worn on formal occasions, such as receptions, weddings, balls. The gown has ruffled wing pieces (as in the balintawak) and its skirt tapers gracefully into a fanlike skirt that touches the floor (longer than the balintawak skirt). Sometimes it is worn with a pañuelo, which is a stiffly starched piece of cloth folded into a triangle and arranged around the shoulders as a scarf. A beautiful Spanish fan, elegant slippers and even diamond earrings, rings, pendants and other ornaments may complete the mestiza terno.

Hats are seldom worn by Filipino men and never by women. Any woman who wears a hat, either in Manila or in the provinces, is immediately recognized as a visitor.

Maytime is the most delightful season in the Philippines. It is the season of flowers, of the merriest festivals, of romance. Then all the flowers, including the sampaguita, are in full bloom throughout the archipelago. Days are warm, inviting families to picnic by a river or at the seashore. Swimming pools and bay-

CORREGIOOR, fortress island near Manila. It was the scene of desperate fighting, 1942.



side resorts are jammed with joyous bathers. Nights, however, are pleasantly cool, with a romantic feeling in the air mid the fragrance of blooming flowers.

It is on May nights that the cities and towns of the Philippines enjoy the festival spectacles of the Flores de Mayo and the Santacrusan. The performers in the Flores de Mayo are all girls, the prettiest ones in town, from the ages of seven to twenty-one. Their leader is the Reina de las Flores (Queen of the Flowers). The girls carry garlands of flowers on a procession around the town, which ends at the church. There they offer the flowers of May to the image of the Virgin Mary, whom they also call the "Queen of Heaven" and "Patroness of Flowers,"

Evening Procession in Candlelight

The Santacrusan is a mixed affair, with boys and girls participating. The young people march with lighted candles, singing the hymn "Dios te salve, Maria." At the head of the procession is a big black cross, borne by a husky boy. Between the two files of singers the chief characters of the spectacle move in a single file-Infanta Judith, Reina Sentenciada (condemned Queen), Reina Ester (Queen Esther), Reina de las Flores (Queen of Flowers) and Reina Helena (Queen Helen)—and their respective zagalas (ladies in waiting). The queens are the chosen beauties of the town or from elsewhere, and the loveliest among them is the Reina Helena. A boy-king, Constantine, marches by the side of the Reina Helena. Like the Flores de Mayo the Santacrusan is celebrated more as a social festival than as a religious ceremony. It does, however, commemorate the recovery of the Holy Cross (Santa Crus) by Empress Helen (mother of Constantine) of the Byzantine Empire. The procession ends at the house of the hermano and hermana (the "stage managers" of the spectacle), where all the performers and the public as well are entertained with a supper. A rondalla (band of guitar players) furnishes music.

The Filipinos take great pride in being the only English-speaking people in

Asia. They have their own national language—Filipino; but this is really the Tagalog tongue. Though Tagalog must be taught in all schools, it is not yet spoken throughout the archipelago. English is the language most commonly used by the people in all parts of the Philippines. A peasant boy in a remote barrio, a bootblack in Manila, a forest ranger in the jungles of Mindanao and a magistrate of the Supreme Court-all speak English. Any English-speaking visitor can go to any of the islands without an interpreter and can talk directly with the people and feel at home. Aside from English, educated Filipinos also know another world language-Spanish. This second foreign language is the social language of the Philippines, necessary for easy conversation on formal occasions.

The Filipinos have a natural gift for languages. An average Filipino can learn any language under the sun with great ease. Such linguistic prowess is sharpened by environment. The Philippines are virtually a babel of tongues, for there are more than eighty-seven native dialects in the islands. So every Filipino is, by necessity, polyglot. It is quite usual for a Filipino to speak English, Spanish, Tagalog and several dialects.

Musical Talent, Filipino Birthright

Another outstanding trait of the Filipinos is their talent for music. They are born musicians. As the gift of tongues is in their brains, so is poetry in their hearts and music in their blood. Although the Filipinos have been influenced by the music of Spain and America, they still keep the musical lore of their Asiatic ancestors. In school programs and in public concerts, they dance the folk dances and sing the folk songs of old Malaysia with the same grace and fervor as the bygone troubadours of their storied past.

Sweetest of their ancestral songs is the *Kundiman*, the greatest of Filipino love songs. It is a tenderly haunting refrain. On moonlit nights, especially in the villages, young men still carry out the custom of the serenade. Accompanied by friends



IFUGAO RICE TERRACES, on Luzon. The Ifugaos are skilled irrigation engineers.

-one is certain to be a guitarist-the suitor stands below the bamboo window of the girl's house and sings the Kundiman. As the song breaks the silence of the night, the sleeping girl awakens, Then she may appear at the window and listen with enraptured attention to the boy. The song over, she thanks him with a smile and bids everybody farewell -"magandang gabi" (good night). The happy young man and his friends then sing again and go away. It can also happen that no matter how many songs the young man may offer during the harana (serenade), the girl refuses to appear. Then the serenaders depart in silence, forlorn.

Of the numerous folk dances of the Philippines, the *Tinikling* is the most popular. The young man and woman are both barefooted and garbed in colorful native dress. They nimbly hop and skip over two bamboo poles, which are clapped, like *tiniklings* (jumping birds). Besides

the trumpeting clap of the bamboos, the dance is accompanied by the tinkling music of a guitar. It is an amazing display of agility and perfect harmony between melody and action.

Like their brother Asiatics, the Filipinos are hardy and brave, inclined to accept both weal and woe without complaint, patient and self-sacrificing. Their family ties are close and they love children.

However, emphatically unlike their Asiatic neighbors, the Filipinos have the highest regard for womanhood. Nowhere else in all Asia do women occupy such a high position in society or such a cherished place in the hearts of their families. Politically, socially and economically, they are the equal of men. They were the first among Asiatic women to enjoy the right to vote; to be elected to Congress and other government offices; to be appointed to the president's cabinet and to administrative, judicial and diplomatic posts; to study in universities and graduate in law, engineering, medicine, education, liberal arts, architecture and dentistry. Socially also, they are on an equal plane with men.

Woman has never been used as a beast of burden nor degraded in other ways in the Philippines. Almost all Filipinos are Catholics, and marriage is for life. According to tradition and by law, the Filipino woman is her husband's partner, in rags or riches; the family treasurer who supervises the household finances and has a voice in all natters affecting the family welfare; first teacher of the children, who learn their prayers and the alphabet on her lap; and the loving queen of the home she reigns over and governs.

Among the younger generation of Filipino women, notably the high-school and college girls, Western influences are evident, both good and bad. The girls are alert and independent. In clothes and grooming, they could hardly be distinguished from the young women of North America.

Most nostalgic of the Filipino customs and the one that illustrates their finest traditions is the ritual of parting. A boy in the provinces, setting off for college, perhaps in Manila, reverently kisses the hands of his parents as an expression of love and respect. The parents bless him and remind him to study hard, to remember his bedtime prayers and to write home. There is no kissing on lips or cheeks. Even farewell kissing in public between sweethearts or between husband and wife is considered in poor taste. Only a last handshake, a farewell salute, a few



EWING GALLOWA

CIRCULAR RAFTS heaped with coconuts drift downriver. It is a very easy way to get coconuts to market as on placid streams the rafts float with the current or they can be towed.

tears for the bitter-sweetness of good-by are acceptable with good grace.

A foreigner leaving the Philippine shores is escorted by his Filipino friends to the airport or the ship. Before he departs, they smilingly place a sampaguita lei around his neck, load him with gifts and shake his hand. Then they affectionately bid him: "Mabuhay!"—a farewell greeting similar to Spain's Adios, Japan's Bansai, Mexico's Vaya con Dios and Hawaii's Aloha Oe. As they watch the plane zooming into the azure skies or the ship sailing toward the horizon, they wave their handkerchiefs and pray, deep in their hearts, for his good health—and bon voyage.

GREGORIO F. ZAIDE



UNATIONS

NEW POTS, fresh from an open kiln. The Government trains villagers in pottery making.

PHILIPPINE REPUBLIC: FACTS AND FIGURES

THE COUNTRY

The largest group in the north Malay Archiclago; composed of about 7,100 islands and islets. Only 2,440 of them are named, and there are only 462 with areas of one or more square miles. Bounded on the north by the Bashi Channel; on the east by the Philippine Sea; on the south by the Celebes Sea; on the west by the South China Sea. The total land area is about 114,830 square miles; the two largest islands are Luzon (40,420 square miles) and Mindanao (36,537). The estimated total population is 21,030,207.

GOVERNMENT

Formerly an insular possession of the U. S., the area became an independent republic in 1946. It has a constitutional form of government, with a president and a vice-president elected for a 4-year term; both may be re-elected. The president is assisted by 10 departmental secretaries. There is a two-house Legislature composed of a Senate, with 24 members elected for 6 years, and a House of Representatives, with membership not to exceed 120, elected for 4 years. All over 21 may vote if they can read and write Spanish, English or a native dialect and if they meet certain residential qualifications.

COMMERCE AND INDUSTRIES

Agriculture is the chief industry; principal products—rice, Manila hemp, coconuts, sugar cane, corn, tobacco, maguey, pineapples. Government owns more than 90% of the commercial forests furnishing timber, gums, resins, vegetable oils, bamboo, tan and dye barks. Livestock includes hogs, carabaos, cattle, horses and goats. Gold, chromium and copper are mined in commercial quantities. Considerable embroidering

and weaving is carried on by home manufacturing, but factories are increasing. Chief exports are coconut and hemp products, sugar, base metals, lumber, canned pineapple and embroideries. Imports include rice, wheat, dairy products, iron and steel manufactures (especially passenger cars and electric refrigerators), soap and cigarettes.

COMMUNICATIONS

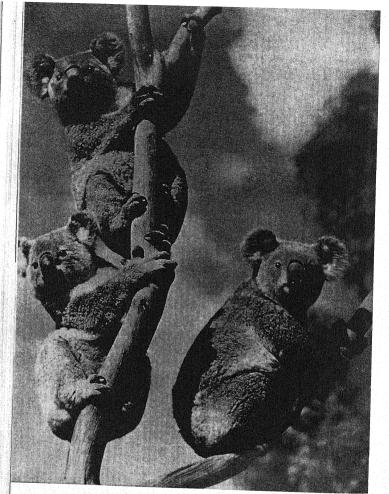
Overseas trade is carried mainly by American, Norwegian and British vessels. Highway mileage, nearly 18,000 miles; railways, about 700 miles; post offices, 1,600; telephones, 31,000; motor cars, 50,000; trucks, 54,000. Philippine Air Lines, Inc., provides domestic and international air service.

RELIGION AND EDUCATION

The dominant religion, Roman Catholic, comprises about 83% of the population; Philippine Independent Church, 7,6%; Mohammedans (mainly in Mindanao and Sulu), 4,1%; Protestants, 2,3%; pagans, 1,8%. Education is free and coeducational; more than 3,600,000 children attend 24,000 government schools. There are also private, normal, trade, agricultural and nursing schools. Besides the state-supported University of the Philippines, there are about 90 other institutions of higher learning, 12 of them in Manila alone, including the University of Santo Tomas.

CHIEF TOWNS AND POPULATIONS

Quezon City, capital (Luzon Island), 108,-000; Manila (Luzon), 1,200,000; Cebu (Cebu), 167,500; Davao (Mindanao), 111,300; Iloilo (Panay), 110,100; Zamboanga (Mindanao), 103,300; Bacolod (Negros), 101,400.



KOALAS—AUSTRALIAN COUSINS TO THE KANGAROO AND OPOSSUM

Australian native bears, or koalas, are not live "teddy bears" but tree dwellers that carry their young in pouches. Animal gourmets, they eat only the leaves of certain eucalyptus trees.

THE ISLAND CONTINENT

Home of the Australians

In the skies above Australia and in its flag gleam the stars of the Southern Cross, for Australia is the only continent that lies wholly south of the equator. People living to the north often call Australia the land "down under." Less than two hundred years ago, it was a mysterious place, almost unknown to the rest of the world and inhabited only by wandering tribes of primitive people. Today, it is a thriving, self-reliant nation of people who still bear the stamp of their pioneering ancestors. A loyal partner in the British Commonwealth of Nations, Australia is, at the same time, a separate country.

AUSTRALIA is the smallest continent and the largest island in the world. In fact, it is about twenty-five times the size of the British Isles. At its widest parts, it is about 2,400 miles from east to west, and about 2,000 miles from north to south. Including Tasmania, there are 12,210 miles of coast.

Australia is one of the oldest of the continents, formed at an early period in the earth's history. It is the most level in surface and the most regular in outline. There are no towering peaks—only the worn-down stumps of mountains that were high long ages ago. The chief mountain system is the Great Dividing Range. It runs like a giant fishbone down the whole length of the east coast, from the northern tip of Queensland to the southern part of Tasmania.

This range includes the beautiful Blue Mountains, in New South Wales, where Mount Kosciusko reaches the greatest height (7,328 feet) of any peak in Australia. Covered with snow in cold seasons, the Blue Mountains are a paradise for winter sports as well as for hunting and fishing.

Along the coast of eastern Australia, there are wide, deep valleys that long ago were carved out of high plateaus by swift rivers. This same process left spurs of cliffs at the edge of the coast, flanked by sandy beaches.

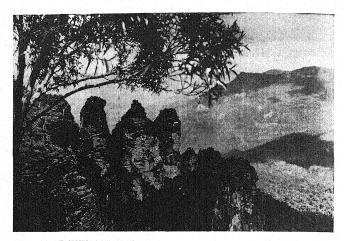
One of Australia's most fascinating features is the Great Barrier Reef, which skirts the coast of Queensland. The reef—actually a maze of reefs, shoals and islands—stretches for 1,270 miles and

shelters a lagoon of 80,000 square miles. The strange plant and animal life here is of great interest to scientists, and the government of Queensland has a research station on Heron Island, in the heart of the lagoon. The reef is formed of coralcountless skeletons of tiny marine creatures called polyps. Flowerlike sea anemones wave their tentacles in the warm waters. Here live the dugong, or sea cow, and the mud skipper, a true fish, though if kept long under water it will drown. On many of the reef's islands there are cool, twilit forests of pisonia trees. Their sticky fruits are death traps for small birds winged insects and spiders. Noddies and other terns nest in these trees, besides shearwaters (mutton-birds), gentle doves, kingfishers, noisy crow-shrikes and even sea eagles.

On the western side of the Great Dividing Range, there is a great plateau, which extends over practically half of the continent. The slopes of this plateau that ascend to the mountains are smooth and usually too steep for a plow. However, where they have been cleared of forest, they have become the world's chief merino wool-growing region.

In the heart of Australia is a great basin, usually dry. Here there are stony (gibber) plains, with little soil and practically no vegetation. The ground consists of limestone or quartzite. Beautiful opals, in which the fires of ages long past still shimmer, are found on these barren plains.

Australia was cut off from Asia at such an early period in the earth's history



THE "THREE SISTERS," RUGGED QUEENS OF THE BLUE MOUNTAIN RANGE
The jagged peaks of the Blue Mountains formed an impenetrable barrier to the first colonists
of New South Wales. Today, they are a popular mountain retreat for the residents of Sydney.



WHERE FERNS GROW TO BE TREES Australia lies in the temperate and tropic zones and has a vegetation as varied as its climate. Graceful "fern trees" flourish in the tropic gullies of the Black Spur ridges near Melbourne.

that animals survived on the island continent that died out elsewhere. It is the home of marsupials, animals that carry their young in pouches. The most famous marsupial is the kangaroo. With the tremendous strength of its tail and rear legs, it bounds across country in great leaps. Most endearing of the marsupials is the koala, which looks like a child's teddy bear though it is not a bear at all. Australia is also the home of perhaps the strangest mammal in the world, the platypus. Its four feet are webbed, and it has the bill of a duck, the tail of a beaver and the fur of a mole. The female lays eggs but suckles her young.

More than a third of Australia lies within the tropics, and the other two-thirds is within the southern temperate zone. Because of this position and the fact that Australia is an island and has no great land barriers, it has, on the whole, a more temperate climate than other regions of the same size in the same latitudes. Over the greater part of the continent the climate is similar to that of southern France

or Italy. There are seldom any extreme degrees of heat or cold.

The winds that blow on Australia are the southeast trades and the prevailing westerlies. The southern limit of the southeast trades strikes Australia's east coast near the border of the states of New South Wales and Queensland. With a few exceptions, especially in Tasmania, the heaviest rains in Australia are along the east coast north of this point.

The westerly winds skirt the southern shores. They bring reliable, light to moderate rains to the southwestern parts of Western Australia, the agricultural parts of South Australia, to the greater part of Victoria and to the whole of Tasmania.

However, Australia has large areas of scant rainfall. In fact, nearly 40 per cent of the continent is, in effect, desert. Of this enormous area, 600,000 square miles is of practically no use to man and only

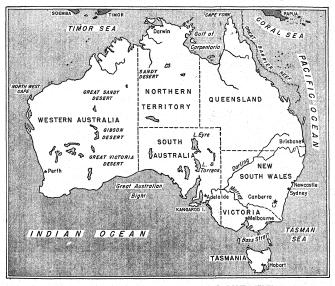


N.W YORK ZUG. J. ILAL SOCIETY

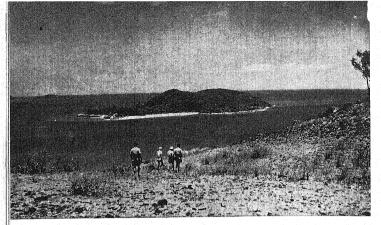
IS THIS CREATURE BIRD OR BEAST? The platypus, native to Australia, is a duckbilled, web-footed mammal that lays eggs.

wandering tribes of aboriginies can eke out an existence in it. In some places, water has been found by boring very deep (artesian) wells, but the water is apt to contain too many minerals and is not enough to make up for the lack of rainfall.

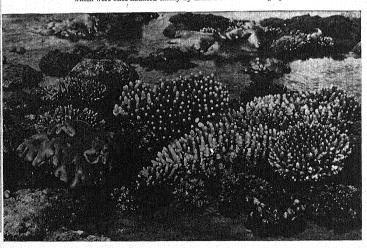
The main Australian river system is that of the Murray (1,600 miles) and its tributaries-the Murrumbidgee, Lachlan



AUSTRALIA, THE FASCINATING ISLAND CONTINENT



THE CORAL SANDS AND SUNLIT WATERS OF THE GREAT BARRIER REEF Australian vacationers have discovered the attractions of the coral islands of the Great Barrier Reef, which were once haunted chiefly by marine scientists and gaily colored fish.



A BRIGHT CORAL GARDEN MORE THAN A THOUSAND MILES IN AREA

The Great Barrier Reef, a chain of islands north of Queensland, has been raised from the ocean
floor by the action of microscopic coral animals working for many thousands of years.

THE ISLAND CONTINENT

and Darling. This system drains an area of 414,253 square miles, larger than the combined areas of France and Spain. The Murray and its branches rise in the Great Dividing Range and find their way to the sea through South Australia. On the eastern side of the Great Dividing Range, many short rivers run to the sea. So swift are their currents, however, that

corner of the continent. These forests are open and seem like parks. Both hardwoods and eucalypts are found in Western Australia. Here two of the chief timber trees are jarrah and karri. The karri is one of the handsomest trees in the world. It reaches up to 300 feet, seldom branching below 150 feet.

Beyond the eastern mountains are wide



A LOBSTER FISHERMAN PREPARES TO TRAP A SUCCULENT CRUSTACEAN

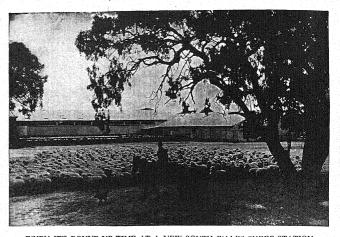
The export of frozen lobster tails is big business to the lobsterman. He buovs his wire pots with

The export of frozen lobster tails is big business to the lobsterman. He buoys his wire pots with glass globes but, as in all fishing tales, some of the fish are carried away by the current.

few good harbors have been formed. Many of the rivers that run inland, north of the Murray system, are swallowed up in the dry sands of the interior.

In the tropical north are dense forests of cedar and other softwood trees. The famous evergreen eucalypt forests occur in the well-watered coastal regions of the eastern seaboard and in the southwest

belts of pine and more eucalypt trees. Farther inland there are savannas, where mulga and other acacias grow, and belts of mallee, a low-growing eucalypt. These areas are often well-grassed. Between the grassland zones and the desert regions are tracts of saltbush and bluebush. These are low, fleshy-leaved shrubs, which thrive in dry soil and are good



WHEN IT'S ROUND-UP TIME AT A NEW SOUTH WALES SHEEP STATION
At some Australian stations 70,000 sheep are sheared during the six-wecks shearing season. Here,
a "jackeroo," Australian for young stockman, herds the sheep toward the shearing sheds,

sheep food. In fact, almost every plant in Australia may be eaten by sheep and cattle. For this reason, the wool and cattle industries are built more on herbage and scrub pasture than on improved grassland.

It was the American War of Independence that first turned Britain's eyes toward Australia. England's prisons were full and as the American colonies were closed to any more such exports of "undesirables," attention turned to Australia. Only a few years before, in 1770, Captain James Cook had discovered the east coast and had written about it with enthusiasm. So, in 1787, a fleet of eleven ships set sail for Australia with 1,500 persons-800 of whom were convicts. In January 1788, after a wearisome voyage of eight months, this fleet reached Botany Bay, near where Australia's largest city, Sydney, now stands.

The early settlers had a hard time. There were few farmers or skilled workers among them. Sometimes it was many months between rains and the soft English wheat they had planted died. For a long

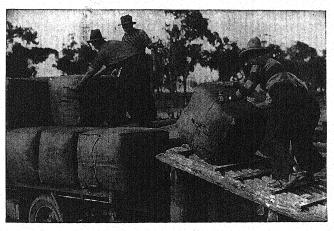
time the settlers depended wholly upon supplies from England, including flour. When a ship was lost or delayed they went on hard rations of rice and salt pork. Too, the first settlement found itself hemmed in on a strip of land between two barriers—the vast Pacific Ocean and the wall of the Blue Mountains. Though not so high as the mountains of Europe, Asia and the Americas, these still presented a formidable obstacle to the further colonization of the Australian interior.

The land seemed anything but hospitable, and the establishment of permanent colonies was one of the toughest pioneering jobs ever undertaken. The outstanding names in early Australian history are not those of soldiers or statesmen but of explorers. These were the men who really developed Australia. They realized that they had to find better land than existed around the small settlement of Sydney, but it was twenty-five years before two men, named Wentworth and Blaxland, finally managed to find a way over the Blue Mountains. Once over the barrier, they saw great fertile plains that



GOING, GOING, GONE! BUYERS AT A MELBOURNE WOOL AUCTION

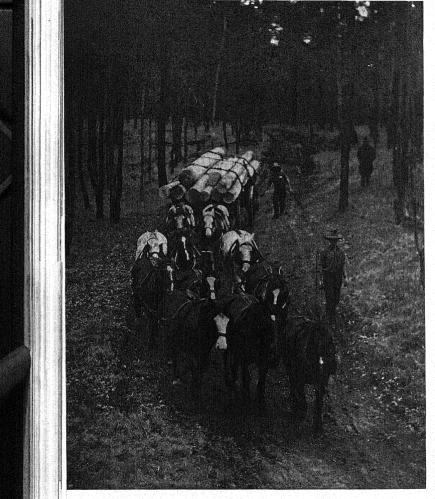
Bidding is a spirited but serious matter for these buyers from woolen mills the world over, who are competing for the best of the Australian crop at the Melbourne Wool Exchange auction.



GETTING WOOL OFF TO THE CITY MARKET FROM A SHEEP STATION

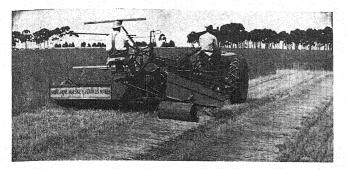
Heavy bales of wool are being dragged from the shearing sheds for transportation to the railheads.

The bales are destined for Sydney, the biggest wool-shipping center in the world.



DRAY HORSES HAULING LOGS IN THE FORESTS OF QUEENSLAND

Machines cannot penetrate the dense interior of the Australian timberlands and horses and bullorks are still used. Queensland is noted for the fine quality of its cabinet-type woods.



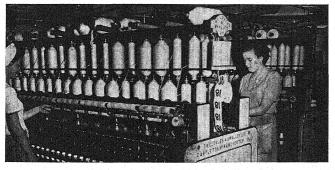
REAPING AND SPREADING A FIELD OF FLAX

A mechanical reaper-spreader cuts and spreads a flax crop in South Australia. The fibers are then retted, or soaked, to separate them for linen. Flaxseeds yield linseed oil.

stretched westward, and their reports started other explorers on the westward trek. Colonists followed, who brought cattle and sheep with them. In some ways progress was similar to the early development of the West of North America. However, as the Australians drove farther westward, they found deserts instead of great fertile valleys and prairies.

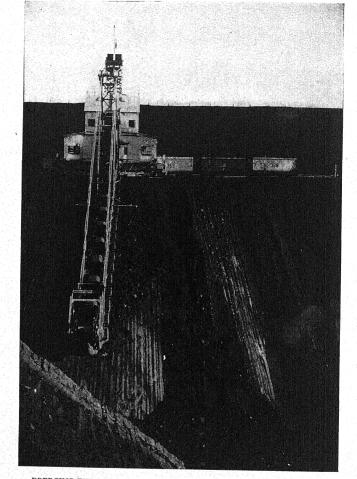
Thereafter the population increased very slowly, for there was little to attract newcomers. Settlement might have con-

tinued at this slow pace, but chance and one man's alertness changed the course of Australian history almost overnight. In 1849, Edward Hargraves, an unsuccessful sheep farmer of New South Wales, went to California to join the gold rush. He had no luck, but he was a very observant man and he noticed that the countryside where the richest California finds were made looked very much like the country-side around his Australian home. With this in mind, he returned to Australia in



WHIRRING SPINDLES IN A LARGE COTTON FACTORY

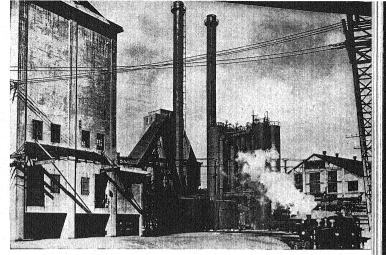
Australian textile mills produce fine fabrics for the home trade and for export. These girls are tending the spinning frame in a cotton mill in Kilkenny, South Australia.



DREDGING THE BROWN COAL MINES FOR FUEL AND ELECTRIC POWER

The dredgers used in the open pits of the brown coal, or lignite, mines at Yallourn, Victoria, can dig ninety feet. The mineral is used to generate electricity and for fuel briquettes.

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PRODUCING STEEL FOR THE HEAVY INDUSTRIES OF AUSTRALIA

A view of the steel works at Newcastle, New South Wales. Newcastle, the center of the steel and coal industry, has played an important part in the rapid industrialization of Australia.

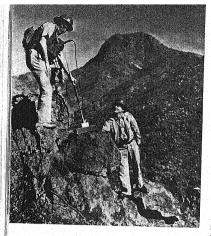
1851 and, within a few weeks, he struck it rich around Lewis Ponds, New South Wales. Hargraves' good fortune was followed by strikes in Victoria and Western Australia. The word spread and people poured in from all quarters of the globe. In the next ten years, Australia's population jumped from 405,000 to 1,145,000. During this period, Australia produced more than \$224,000,000 worth of gold. The discovery of gold also produced a social and economic revolution, for, prior to Hargraves' find, pastoralists, or squatters, had dominated the economic life and government of Australia. Though the country still rides "on the sheep's back" as far as overseas trade is concerned, the democratic ideas stirred up by the goldmining days are now the accepted commonplaces of government.

The first Federal Convention, which prepared the draft constitution of the Federated States of Australia, was held in Sydney in 1891. The Commonwealth of Australia came into existence by an act of

the British Parliament in July 1900, which took effect from January I, 1901. The Constitution was worked out by Australia's own leaders and was established by democratic ballot taken among the Australian people. The first Prime Minister was Edmund Barton.

To understand Australia's Constitution, we must remember that it is a federal constitution. That is, the governments of the various states did not lose their separate identities. The state parliaments, under the Commonwealth Constitution, agreed to federate, or to hand over some of their government powers—but by no means all—to a central, Australia-wide government.

The spirit in which the task of drafting a federal government was approached was expressed by one speaker in these words: "I hold it to be a basic principle of this federation that we should take no power from the States which they could better exercise themselves; we should place no power in federation which is not abso-



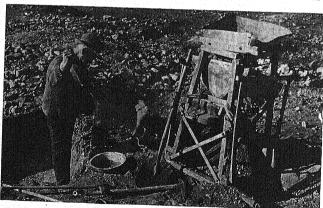
ORE MORE PRECIOUS THAN GOLD

The atomic age has sent the world on a treasure hunt for uranium ore. Modern prospectors armed with Geiger counters seek new deposits of the rare metal in the Flinders Range. lutely required for carrying out its purpose."

There are about 8,500,000 Australians. The national income of Australia was almost \$7,000,000,000 in a recent year. The personal income of Australians in the same year was more than \$6,530,000,000, of which more than \$3,350,000,000 was received in wages and salaries by about 3,000,000 people. A further 600,000 worked on their own account.

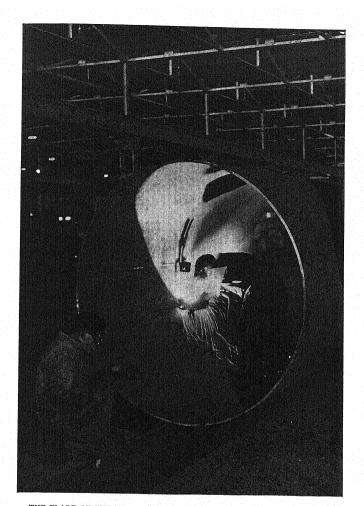
Almost from the earliest days of settlement, Australia was a great primary producing country (agricultural products and basic raw materials), exporting large surpluses overseas. Today many persons abroad (and to some extent in Australia itself) are inclined to think of the average Australian as a man on the land. But although Australia retains her great primary industries, she has become one of the world's most highly industrialized nations, and the value of her production from industry is almost equal to that from the land.

It is interesting to note, however, that, in numbers, more than half of Australia's



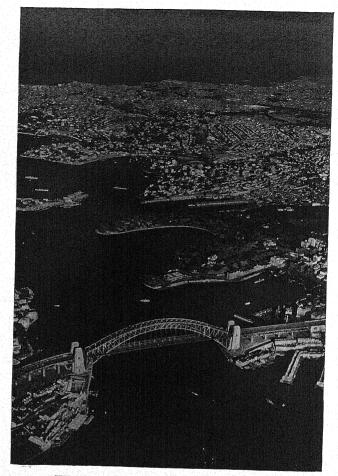
A WESTERN AUSTRALIAN GOLD-DIGGER'S EQUIPMENT

The mechanical dryblower, at right, is used in the gold fields of Western Australia. As the tray shakes, dirt and dust are blown away, leaving any gold particles in the bottom.



THE FLARE OF THE WELDING TORCH AND THE RING OF THE HAMMER

At a gigantic New South Wales engineering plant, a welder seals the seam of a boiler. The man with the hammer hits the metal and the ringing sound tells him whether the metal is welded.



THE MAGNIFICENT HARBOR OF SYDNEY, AUSTRALIA

Sydney, the largest city and seaport of Australia and a famed industrial center, is the capital of New South Wales. It is the oldest Australian city, as well as the most populous, having been founded in 1788. In the foreground is seen one of the world's great steel arch bridges, the Sydney Harbor Bridge. It is 160 feet wide and has a span of 1,650 feet.



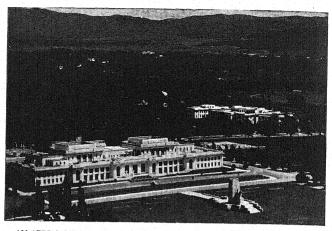
MANES FLOWING AND FEET FLYING, WILD STALLIONS SEEK FREEDOM

The brumby muster is a rough and exciting chase. Brumbies are Australian wild horses. A cowboy pursues the stallions toward the open country, away from the treacherous rocks.



ROUGH RIDING IN THE VAST CATTLE COUNTRY OF QUEENSLAND

Goondiwindi, Queensland, is the scene of the annual Bushman's Carnival. This cowgirl is competing in the camp drafting contest. In this event the task of the rider is to cut out a bullock from the herd and to drive the animal to a designated sector of the corral. The judges award points for the degree of horsemanship displayed by the hard-riding cowhands.



AN AERIAL VIEW OF THE FEDERAL PARLIAMENT HOUSE IN CANBERRA Canberra, the capital of Australia, is a lovely tree-lined city situated at the foothills of the Australian Alps. The monument in the foreground is the King George V Memorial.



WAITING FOR THE GAME TO BEGIN AT THE MELBOURNE CRICKET GROUND When Australia plays host to the "Battle of the Ashes," a series of championship cricket matches between England and Australia, the contest is held in this huge cricket ground.

THE ISLAND CONTINENT

industries are tertiary—that is, they provide services of various kinds. This means railways and roads, air lines, telephones, telegraph, radio and so on. The large proportion of such industries shows that Australians have a comparatively high standard of living.

Wool is Australia's greatest primary industry. In a recent year there were 116,000,000 sheep, and the value of the

Beef production runs to about 650,000 tons a year, and dairies produce about 165,000 tons of butter and 45,000 tons of cheese. Supplies of beef, mutton, lamb, butter and cheese are usually above the quantities needed at home, and the surpluses are exported, mainly to the British Isles.

Although Australia does not rank high as a wheat-producing country, she is one



BIGHTEEN-FOOTERS SKIM ACROSS THE WATERS OF SYDNEY HARBOR

Yatching is not a rich man's sport in Sydney, but a popular pastime. On regatta days, the eighteen-foot sailing yachts with ballooning spinnakers are the rulers of the big harbor.

total wool production was about \$750,000,000. With a normal annual clip of more than 1,000,000,000 pounds, Australia produces about 30 per cent of the world's wool and more than half of its merino wool. It produces 40 to 60 per cent of all wool and 70 per cent of all merino wool entering into world trade. Lamb and mutton (277,000 tons in a recent year) and sheep skins are important parts of the industry.

of the world's four principal wheat exporters. More than half the crop is shipped abroad. In a recent year the harvest from nearly 12,000,000 acres was 184,000,000 bushels.

There are important coal fields in the eastern mountains. In fact, the brown coal of Yallourn gives the state of Victoria most of its electricity. Early in the 1950's, uranium was discovered at Radium Hill, in South Australia.



A STATELY, MODERN HIGH SCHOOL BUILDING IN MELBOURNE

The Australian states support the primary and high schools in their areas. The Boys' High School at Forest Hills, a suburb of Melbourne, is one of the finest schools in Victoria state.

The majority of the Australians live in towns or in the capital cities of the six states. Largest of all is Sydney, capital of New South Wales. It has a magnificent harbor, spanned by one of the greatest steel arch bridges in the world. Sydney's George Street is the busiest thoroughfare in the whole of Australia.

Canberra, capital of the Australian Commonwealth, is in its own Federal Territory, not far from Sydney. Everywhere in Canberra there are avenues of trees—native gums (eucalypts), foreign oaks and flowering fruit trees. The location of the city is beautiful. To the south are the Australian Alps and to the north the Blue Mountains. In recent years, the population of Canberra has been growing at a rapid rate.

Darwin, once simply a lonely outpost on the northern coast, also has been growing at a swift pace since World War II, when it was the target for devastating bombing raids. The town is the chief trading center for the Northern Territory and a terminus for overseas air traffic.

The largest shipyards in Australia are at Whyalla, on the coast of South Australia. This town is becoming one of the country's most important industrial centers. Near by are Australia's chief ironore resources, and there are plants for

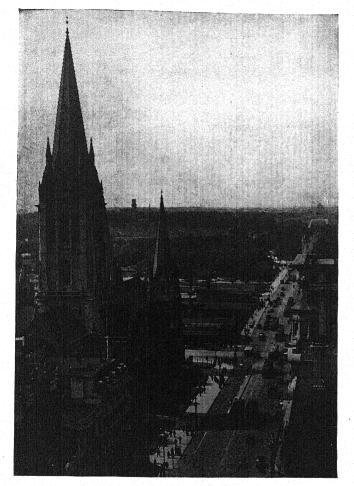
the manufacture of steel in Whyalla. Australia is one of the most highly urbanized countries in the world. One reason for this is that settlement has been mainly on the fertile coastal strips. Also,

Australian agriculture is highly mechanized, which means that large farms and livestock stations can be run with comparatively few hands. What is more, the growth of a big export trade has led to the development of the ports that, in most instances, are the state capitals.

In New South Wales, the railways radiate from Sydney like the spokes of a giant wheel. They also branch out from Melbourne, capital of Victoria, from Adelaide, capital of South Australia, and, to a lesser extent, from Brisbane, capital of Queensland, and from Perth, capital of Western Australia. In all there are some 28,000 miles of railways, which carry about 500,000,000 passengers a year.

Air transport is playing a big part in Australia, a land of immense distances. Air routes over the continent total 68,000 miles. By flying-boat, it is only a few days from London, by way of India, or from the western coast of North America. Today, Australia is a crossroads south of the equator of both air and sea routes.

Because of its special features, Australia has developed some novel educa-



ST. KILDA ROAD, ONE OF MELBOURNE'S TREE-LINED BOULEVARDS
In 1837 the city, founded two years before, was named in honor of Lord Melbourne, British
Prime Minister. It is laid out with wide thoroughfares and numerous parks and public
gardens. Between 1901 and 1927 the city was one of the temporary seats of the Australian
Government. The spired church at the left of this picture is St. Paul's Cathedral.



ESSENDON, MELBOURNE, AUSTRALIA'S BUSIEST AIRPORT

A passenger bus leaves Essendon Aerodrome for Melbourne, seven miles away. Air travel is one of the principal means of transportation between the widely scattered Australian cities.

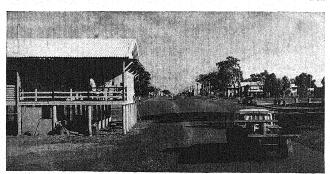
tional systems. For children who live on sheep and cattle stations, long distances from any town, instruction is given by correspondence. In each of the state capitals there is a school with perhaps forty to eighty teachers and no visible pupils.

Tasmania was a pioneer in developing what are called "area" schools. Ten to fifty acres are set aside as a school estate. The children who attend receive class-

room instruction and they also work on the estate in various activities related to their studies. They build barns, sow crops, care for livestock and so on.

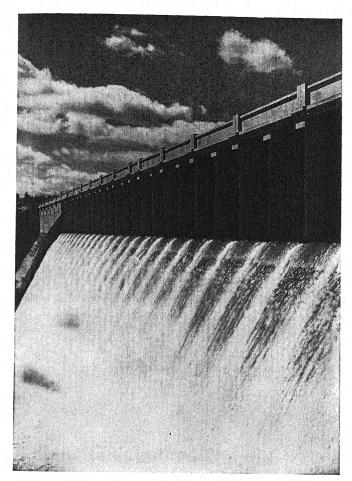
The Australians are friendly people, who welcome visitors with open-handed hospitality. Descendants of pioneers who suffered great hardships, they are robust and independent-minded.

BY HARTNEY ARTHUR



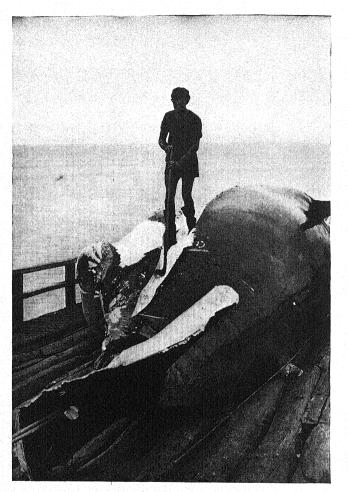
DARWIN, CAPITAL CITY OF THE TROPICAL NORTHERN TERRITORY

Darwin was badly damaged by Japanese bombing raids during World War II. The houses on this rebuilt road are especially designed for comfortable living in a tropical climate. Airy and louvered (using slanted boards to admit air and keep out rain) they are built on stilts for coolness and to keep out the wood-eating termites that infest the area.



HARNESSING THE WATERS OF THE MIGHTY MURRAY RIVER

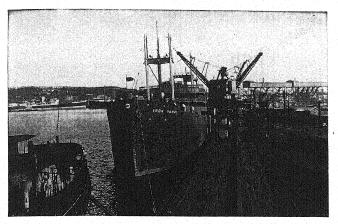
The spillway of the Hume Dam, part of a vast irrigation project on the Murray River. The Murray, with headwaters in the snow-capped Australian Alps, wanders for 1,609 miles, forming the boundary between the states of Victoria and New South Wales. The great Hume Reservoir supplies water to irrigate the sun-drenched plains of central and northwest Victoria.



PREPARING TO STRIP THE BLUBBER FROM A HUMPBACK WHALE

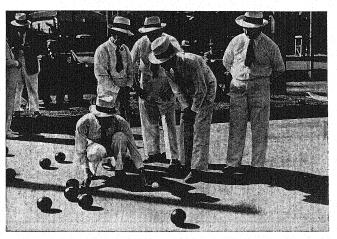
Whales are brought from the catcher boats to the shore station at Babbage Island. They are then flensed—stripped of their skin and of the blubber, which is processed into meal and oil.

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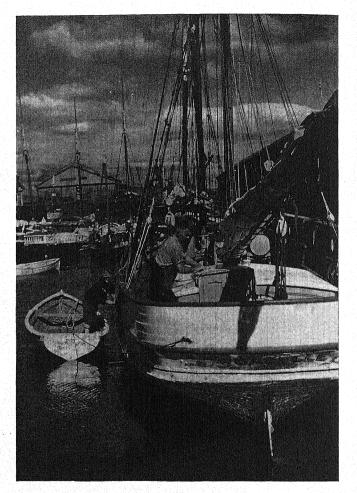
CARRYING IRON ORE TO THE BLAST FURNACES OF NEWCASTLE

The Iron Yampi is an Australian-built cargo ship which makes the run from the iron mines at Cockatoo Island to the steel workers at Newcastle and Port Kemblea, in New South Wales.



HIGH TENSION AT THE "HEAD" OF A GAME OF BOWLS

At the end of a game of bowls, the players often use a tape measure to determine which of the bowls is nearest to the "jack," the small white ball at the center of the photo.



TASMANIAN FISHERMEN READY THEIR BOATS IN HOBART HARBOR

Hobart, the capital city of the beautiful, heart-shaped island of Tasmania, smallest state in the the Commonwealth, is a thriving port with unsurpassed shipping facilities.



UNLESS OTHERWISE INDICATED. AUSTRALIAN

HOP-PICKING TIME IN THE BUSHY PARK-GLENORA AREA. TASMANIA

Each hop picker watches intently the vital business of weighing the bags of hops. The picker's wages are based on the weight and the number of bags he has picked in a day.

AUSTRALIA: FACTS AND FIGURES

THE COUNTRY

Australia, the smallest continent, is bounded on the north by Timor Sea, Arafura Sea and Torres Strait, on the east by Coral and Tasman seas, and on the south and west by the Indian Ocean. The island of Tasmania, to the south-east, is separated from Australia by Bass Strait. Area, including Tasmania, 2,974,581 square miles; population (1951 estimate), 8,380,207.

GOVERNMENT

A sovereign member of the British Commonwealth of Nations, it consists of 6 states-New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania—and 2 territories-Northern Territory and Federal Capital Territory. Legislative power is vested in a Federal Parliament that consists of the Governor-General as representative of the British crown, a Senate and a House of Representatives. Executive power, formally vested in the Governor-General and an Executive Council, is actually exercised by a Prime Minister and Cabinet ministers who represent the majority party in parliament. For all citizens, male and female, over the age of 21, voting is compul-sory; failure to vote is punishable by fine.

COMMERCE AND INDUSTRIES

Pastoral industries and agriculture are among the chief occupations. About 135,000,000 head of livestock. Chief crops are wheat, oats, bar-ley, hay, potatoes, sugar and fruits. Coal, gold, silver, lead, copper, zinc and tin are the leading minerals. Manufactures include iron and steel, textiles, electrical and radio equipment, drugs, chemicals, paints, machinery and metal work. Leading exports: wool, wheat, meats, flour and butter. Imports: motor vehicles and parts, petroleum, textile piece goods, electrical and nonelectrical power machinery.

COMMUNICATIONS

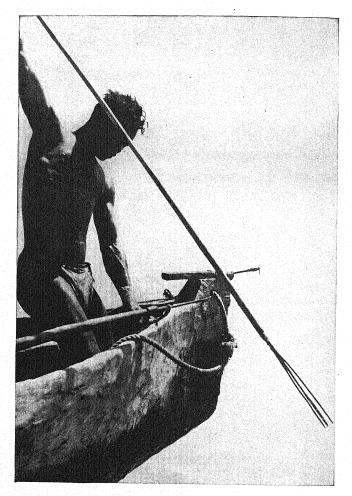
Government-owned railways, about 28,000 miles; 648 miles, privately owned. Hard-surfaced roads, about 125,000 miles. Regular air mail and passenger service. Telephone and mail and passenger service. telegraph systems, government-owned; number of telephone sets, 1,066,385; more than 9,500 telegraph stations; 148 radio transmitting sta-

RELIGION AND EDUCATION

No established church: nearly half of the people belong to the Church of England. The states control and finance public education. Total of primary and secondary, including privately endowed, schools, is 9,800; enrollment, 1,140,739. Each state has a university and a national university is under construction in Canberra.

CHIEF TOWNS

Canberra (capital) population, 19,000 (Federal Territory, 20,772). State capitals: Sydney (New South Wales), 1,549,590; Melbourne (Victoria), 1,288,000; Brisbane (Queensland), 429,530; Adelaide (South Australia), 416,000; Perth (Western Australia), 294,000; and Hobart (Tasmania), 83,600.



FISHING IN THE ANCIENT MANNER

Standing in his dugout canoe, the aborigine watches the water intently, his spear ready to pounce on the first passing fish. Eye and hand work in partnership with incredible speed.

AUSTRALIA'S ABORIGINES

The Original People of the Island Continent

The visitor from Toronto or London or Chicago will find the cities and towns of Australia familiar to him. But to meet the people who lived there for long centuries before the European settlers came, visitors must go far afield. For the Australian aborigines of pure descent have vanished from all but the most remote parts of the continent. The tribes that remain still have an intricate form of government and a religion involving magic, whose secrets have yet to be understood by outsiders. The Australian aborigines invented the boomerang and are among the most skillful of hunters and trackers.

HEIR origin shrouded by the mists of antiquity, the Australian aborigines form a race apart. They are wandering hunters and food-gatherers, without settled communities or knowledge of agriculture, even in their present comparatively civilized state. Yet they have complicated systems of tribal government, social organization and religious beliefs. Regarded in the old colonial days as being of the lowest intelligence and mere cumberers of the earth, they remained a despised people until the voices of those crying in the Wilderness of Indifference were heard and a better understanding of the aborigines spread among white Australians. Even then, governments were slow to act effectively for their welfare and only in more recent years have sincere and reasoned efforts been made to save the most interesting of all primitive races of man from the fate of the Tasmanian race, which became extinct in 1876 with the death of a romantic figure-the "Princess Truganini."

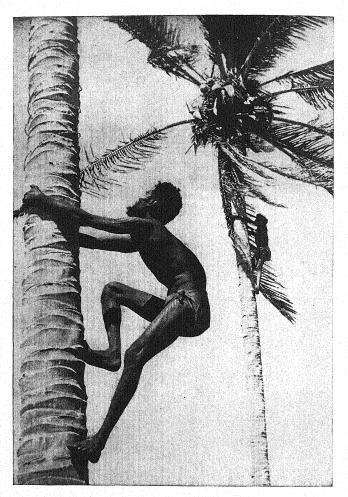
When Captain James Cook made his historic voyage along the east coast of Australia in 1770, it is estimated that there were about 300,000 aborigines. Today there are less than 50,000 of pure descent. We may well describe the decline of these primitive, hardy people as a tragedy.

The southern tribes are represented by only a few broken-up remnants. Decline has been rapid among natives of the central region and in the tropical north. The only exceptions to this are in Arnhem Land and the Kimberley country of the Nor'-west, where large numbers of abo-

rigines are living as their ancestors lived before the coming of the white man to this island continent.

It was very early in human history when the aborigine arrived in Australia—perhaps more than 60,000 years ago. Whence he came we can only conjecture, but the evidence indicates that the ancestral Australians were a small band of venturesome people from southeastern Asia. It is probable that they were the first human beings to come to the land of the kangaroo. They brought with them a wild dog, the dingo, which increased rapidly and spread throughout the continent far in advance of its masters.

However, some authorities believe that, ages ago, Australia and Tasmania-which were not then separated from the mainland by Bass Strait—were occupied by a race of, probably, Negrito people. Perhaps members of a more advanced stock came at a later period and, intermarrying with the original inhabitants, produced a new people. The second of these two theories is disproved by the fact that the aborigines are of an extraordinarily pure stock. They definitely cannot be classed with the Negro, nor do they appear to be related to the Polynesians, the Melanesians or the Micronesians. Their dark brown hair, bushy, wavy or curly, and generally of coarse texture, resembles that of certain wild tribes of India, and distinguishes them at once from the woolly or frizzy-haired Melanesians and Negroes, and also from the lost Tasmanian people, who were certainly more primitive than the migrants from southeastern Asia.



A LONG WALK UP THE COCONUT PALM

Coconuts grow in a cluster at the tip of a palm tree, 80 to 100 feet high. The nut gatherers must literally walk straight up the tree; there are no branches to break the climb.

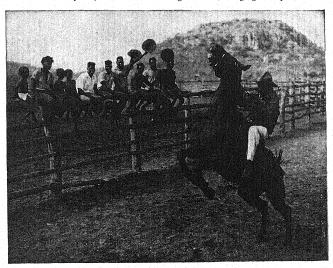
AUSTRALIA'S ABORIGINES

The boomerang has been described, by Lydekker, as "a very curious connection between the Australian aborigines and certain of the wild tribes of Southern India." It is a weapon unknown to any other peoples. The so-called boomerangs of India and of the ancient Egyptians are merely curved throwing sticks, of which the Australian aborigine has many. The true boomerang is an Australian invention, whose essential feature is its ability to hover or remain comparatively motionless in the air. The "return" boomerang, rarely used in hunting, except for throwing into a flock of birds, may be regarded as more or less a plaything. There are hunting boomerangs and fighting boomerangs. Both of these are longer and less curved than the "come-back" one, which can be thrown to travel distances of more than one hundred yards, sometimes mak-

ing several loops.

The aborigine, although sometimes very closely approaching black, might be termed a brownskin, for, frequently, his skin is of a light brown color. The aboriginal infant is born cream-colored; but in a few days its skin darkens, only the palms of the hands and the soles of the feet remaining of a light hue throughout life. Among natives of the western Macdonnel Ranges, the newborn babies, in the majority of cases, have white or tow-colored hair, which darkens with age.

One peculiarity of the aborigine is found also in skulls of Neanderthal man of ancient Europe—an excessive prominence in the bony portion of the skull just above the orbits. This protects the eyes, which are usually dark brown. Very protuberant jaws are a Negrolike feature. The aborigine's nose, though generally broad and



ABORIGINES ARE BORN HORSEMEN

In Arnhem Land live 3,000 aborigines, nomads all. Sometimes they drop in at one of the isolated European missions. Above is a mission corral, with a casual visitor showing his equestrian skill.

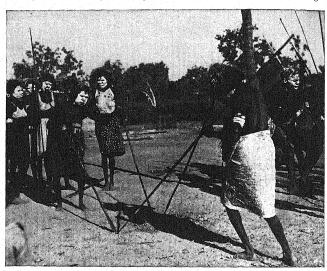
AUSTRALIA'S ABORIGINES

flat, is sometimes distinctly aquiline, as in members of the so-called "Jewish" tribes of central Australia.

The women especially have a stately and graceful walk. They possess a natural dignity, which is apt to be hidden when they wear European clothes. Even partly civilized aborigines of the center and the far north wear but little clothing—the little children, none at all. Many, still living in

common articles of clothing worn by both men and women in wintertime. Summer dress for a man was an apron. Women of some south Australian tribes wore bark or skin cloaks over their backs. Bark-cloth capes were also the fashion among certain Queensland tribes.

Many of the girls are handsome; but all too soon they lose their young charms, becoming "old" women before middle age.

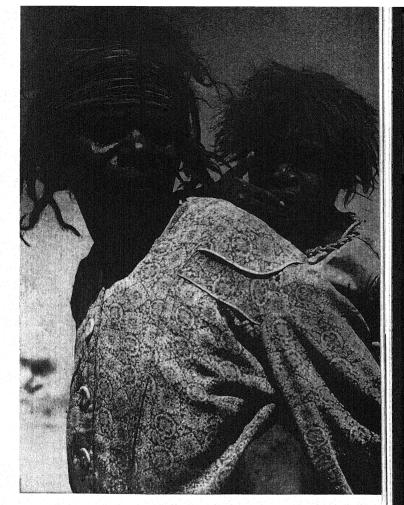


AN ANCIENT MYSTICAL RITE

The spear dance, a ritual during a corroboree, or sacred festival, has a secret meaning krown only to an inner circle. Both men and women take part, their faces painted ceremoniously.

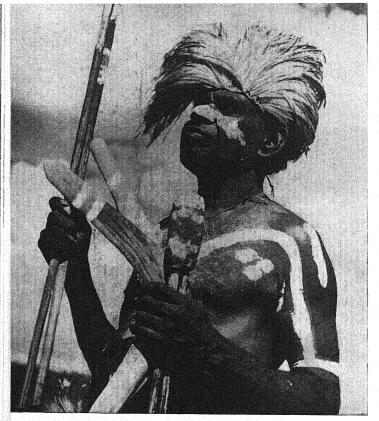
the Stone Age manner, go naked, except for girdles, or waist-belts, with a pendant of pearl-shell or a tassel made of fur. The women wear a bark belt, or a fringe. Human hair is the usual material for making waist-cords or girdles, which often are many yards in length. When tribes still lived in the south, of course, they needed some protection against the cold weather, and kangaroo and 'possum-skin rugs were

The young men of the tribes that have little or no contact with Europeans show the aborigine at his best. He is a natural man, fit subject for a sculptor. And the old men, who administer all tribal matters in their own favor, make a picturesque group sitting in secret council. The younger men are the hunters, but the choicer portions of the game they bring back to the mia mias (the tribal camps) go to the wise



MOTHER AND CHILD OF THE NULLARBOR PLAIN

Aborigines still roam a large, curious region of southern Australia that is perfectly flat. There is not enough moisture to support trees, hence the name Nullarbor (no tree) Plain.



IN FULL PANOPLY OF WAR

Spears, boomerangs and firesticks are the weapons. Emu feathers make the ferocious-looking helmet. Morale is contributed by the war paint—white clay and red ochre—to terrify the enemy.

old fellows according to tribal law.

Although yams and other vegetables form a large proportion of the daily fare, the aboriginal menu includes many items curious, even repulsive, to other people. Witchetty grubs, for example, white ants (termites) and their larvae, caterpillars and clay. Animal tucker is as varied,

ranging from kangaroos, wallabies, 'possums and bandicoots to flying foxes (fruitbats) and wombats, sometimes even the dingo; birds, large and small; and snakes and lizards. On special occasions untamed tribes may be cannibalistic. Cannibalism was widespread before civilization modified or changed completely such savage

customs as the eating of human flesh. Coastal tribes enjoy a far better standard of living than do those of the dry inland regions. At all seasons on the coast there is an abundance of food—fish, turtles and dugong and various kinds of shellfish. In the tropical north, wild pigs provide excellent pork.

The Medicine Man's Power

Although there are no kings or chiefs among the aborigines, a leading position may be held by some outstanding member of a tribe, often the medicine man, whose authority becomes supreme at all meetings of the council. He is recognized as the headman, whose decisions on any matter are unquestioned. The medicine man, apart from treating patients by various methods, including faith cures and mumbo jumbo, often is well paid to cause an enemy's death by pointing the bone. Any aborigine may point a death bone, but when the medicine man sings over one and performs the essential actions, the result is more certain. Unless powerful counter magic comes to his aid, an aborigine who knows that he has been "boned" sits down in despair, sickens and dies. This mysterious power has yet to be explained by modern science, although it is probably psychological.

One of the many strange customs rigidly observed by the aborigine is avoidance of the mother-in-law. Under dire penalty, no man may look at his wife's mother, nor

may she look upon him.

It is harder for women than for men among these nomads. Each tribe wanders within the boundaries of its own territory, living in temporary camps; and the women bear the burdens when camp is shifted. Besides carrying heavy loads of household gear, spare weapons and so on, they must carry the fire-stick and keep it alight. As widows, their lot is harder still, for mourning customs include, not only wailing and shrieking by the lubras (women), but the gashing of their heads with stone knives. Heavy widows' caps, formed of kopai and burned lime or gypsum, were worn by the women of vanished Murray River tribes, and a ban of silence was placed upon the luckless widows, a ban often lasting for months.

Aborigines living under the age-old tribal laws are a moral folk. The laws are strictly enforced, especially those governing marriage. Breaches of some of these laws are punishable by death. This social organization ranks the aborigines above some other primitive races. Not even scientists who study races fully understand the systems of tribal government and all the ceremonies and beliefs that make the aborigine almost a mystery man. While trained scientists have devoted years to the study of this primitive man's most intimate



ALL DRESSED UP IN EAGLES' DOWN

This headman is wearing his ritualistic adornment for the chicken and emu corroboree. Eagles' down is pasted to his body with blood. Chicken and emu are totems of the tribe.

life—which embraces cult totemism (a totem is an object or animal regarded as having blood relationships to a specific family), religious systems and beliefs, family, kinship and complicated marriage laws—it is admitted that these are still mysteries beyond the comprehension of the

average person not an aborigine himself.

Many of their myths and legendary tales are as imaginative as those of much more advanced peoples. A selection of the bed-time stories told among the mia mias, with a little editing, would make a delightful book for children anywhere. The Alcheringa, or Dream Time of the World, when there were only spirits, who created the ancestral spirits of totem animals, groups of men and natural objects generally, is a complicated idea that could have been developed only by myth-makers gifted with intelligence as well as imagination.

Many vocabularies of the aborigines, more or less extensive, have been published. A patient student of the primitive forms of speech thus recorded will learn that the Australian language was general all over the mainland; certain root sounds are found everywhere. However, the numerous dialects show wide variations. An aborigine of the Daly River, say, would find it difficult to understand a native from the Darwin district, speaking in the Larrakia dialect. Such variations, of course.



THROWING A "COMEBACK"
BOOMERANG

The aborigine can throw a boomerang so that it will hover briefly motionless. The "comeback" boomerang is not much more than a toy. Hunting and fighting sticks do not return.

must have developed through centuries.

There is no written Australian aboriginal language, though there are the "letter sticks," carried by official messengers and trading emissaries. These may be emblems of authority, aids to memory, or an invitation from the council of Old Men of a leading tribe to other tribes to attend some important gathering of a national character, such as an initiation ceremony. A letter stick relating to a ceremony bears markings that are readily understood by all headmen of the nation—a nation consists of a varying number of tribes.

The ceremonies of initiation into manhood are reasoned tests of endurance for the boys, apart from their tribal significance.

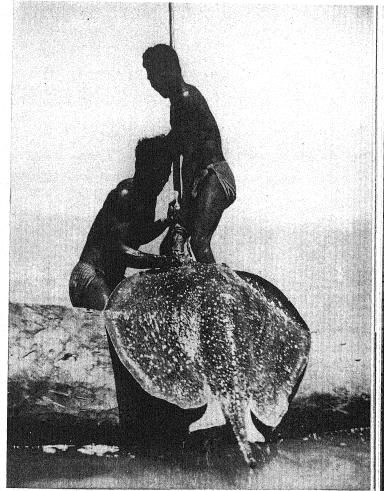
In their ceremonies, the aborigines are very serious, but they possess a sense of humor and are fond of rather rough fun. This is some relief from the fear of spirits and black magic and from the strictness of tribal laws. Aborigine youngsters may have as much fun as other children enjoy, but much of their play is training for the time when the boys will become hunters and warriors. Their playthings include little boomerangs and toy spears. They receive lessons in tracking both men and animals.

Corroborees and "Cat's Cradle"

Dances and games delight the grown-ups. The corroborees sometimes witnessed by outsiders are merely song-and-dance performances—a form of amusement, as the familiar word signifies (corro, to leap or jump; boree, to shout or yell). Western ballroom dances have been described as civilized corroborees. At "cat's-cradle" games the aborigines excel; they are highly accomplished artists in string. Even the girls and boys make, with ease, complicated designs beyond the skill of any other children.

A glance at the aborigine's manners and customs, amusements and achievements, at his daily life and his religious beliefs, reveals him as a deeply interesting human being, with both virtues and failings, like all other men.

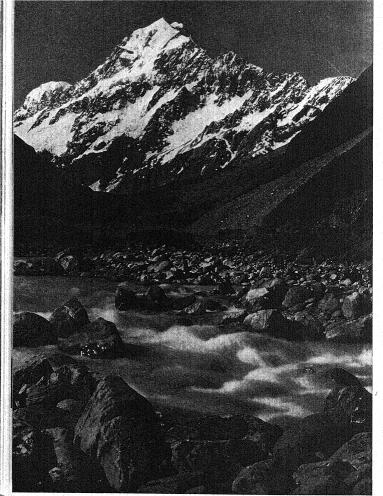
By Charles Barrett, C.M.Z.S.



ALL PHOTOS, AUSTRALIAN NEWS AND INFORMATION BUREAU

A VICIOUS STING RAY SURRENDERS

Fishing becomes dangerously exciting when a sting ray swims past the dugout. These monsters have a whiplike tail armed with sharp spines that exude poison. The meat of some species is edible.



ALL PHOTOS, UNLESS OTHERWISE SPECIFIED, NEW ZEALAND EMBASSY

MOUNT COOK'S WHITE BONNET

In South Island snow-crowned Mount Cook looks upon Hooker River. It is the highest peak in New Zealand, 12,349 feet. It was named for Captain Cook. The aborigines called it Aorangi.

SOUTH-SEA ISLAND NATION

New Zealand and Its People

Most of New Zealand consists of two islands, called simply North Island and South Island. They are in the South Pacific Ocean, a thousand miles south of the Tropic of Capricorn and about twelve hundred miles southeast of Australia. There was a time when New Zealand seemed one of the most far-away places in the world, but airplanes, fast ships and radio have changed that idea considerably. In fact, this once remote country has become a leader in many ways. Its richest resource is its fertile soil. This has been used wisely and has helped to give New Zealand one of the highest standards of living anywhere.

I N its thousand miles from north to south, New Zealand contains an amazing diversity of physical features. Its scenic wonders equal and often surpass those of the rest of the world. It has mountain ranges of extreme grandeur; scores of heautiful lakes and fiords; the largest and most complex thermal (hot springs) region in the world; one of the world's highest waterfalls; and the most remarkable glow-worm cave yet discovered. The climate is pleasant, without extremes of heat or cold, and there are many days in the year when the sun shines brightly.

New Zealand. a self-governing member of the British Commonwealth, lies in the South Pacific, some 1,200 miles south-east of Australia. With a total area of 103,736 square miles in its two main islands, this little country is slightly larger than its motherland, Great Britain, 11,000 miles away. The bonds that link New Zealand with Great Britain are strong, and the loyalty of New Zealanders to the Crown is real. This was proved during two world wars and in the periods of peace that followed.

Remarkable development has taken place in New Zealand since about 1850. The passing years have seen the face of the land change from wild forest to highly productive pasture, until today New Zealand exports more farm produce than any other country. Tiny settlements of roughly built huts have grown into great cities and ports and important market towns. Roads and railways have thrust their way over rugged highlands; huge power dams have been built to harness

rivers; universities, schools and other centers of culture have established fine records; daring experiments in social legislation have given the world a lead, which many countries have already followed.

Today the two million people who inhabit this lovely land look back on these years of progress with justifiable pride.

The Dutch navigator Abel Tasman received a hostile reception from the Maoris (the native Polynesian people) when he discovered New Zealand in 1642. He sailed away without gaining a real knowledge of the land! It was left to an Englishman, Captain James Cook, who made his first visit in 1769, to map the coast-line thoroughly. He also came to know the Maoris and made friends with them.

Casual settlement began early in the nineteenth century, with whalers, adventurers and deserters from ships. This was soon followed by planned immigration. The permanent settlement of New Zealand was no haphazard affair. A Scottish venture, organized by the Church of Scotland, made its landfall in the southern province of Otago, the part of New Zealand nearest in natural features to Scotland itself. The Canterbury plains received settlers from the Anglican (Church of England) organization in the central counties of England. The Taranaki province, closely resembling Devonshire in many aspects, was founded by pioneers from the south of England. The newcomers were well educated, which had its effects in the establishment of New Zealand's fine system of schools.

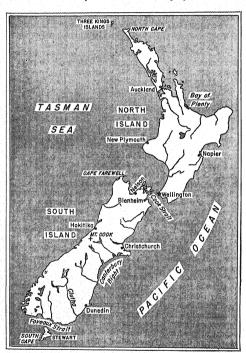
Native chiefs ceded the islands to the British Crown by the signing of the

Treaty of Waitangi in 1840. The treaty recognized the rights of both the Maori and European inhabitants of the new colony.

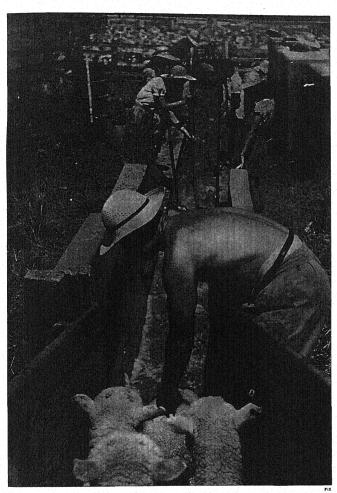
New Zealand was granted a constitution in 1852, and a Parliament in 1854. This was, in fact, a series of parliaments, for in addition to the General Assembly, the provinces also had assemblies. These lasted until 1876. Maoris were given parliamentary representation in 1864. All men of adult age were given the vote in 1879, and women were given the vote —for the first time anywhere in the world —in 1893. Dominion status came in 1907. Today, 98 per cent of the European population are of British stock, and most of the other 2 per cent are descended from French, Danish and Norwegian pioneers, who settled in communities that have left their mark in place names and in the surnames of their descendants. Foreignborn muster less than one per cent of the country's population, in spite of the several thousands brought to New Zealand under the plan of the International Refugee Organization. The balance of the people are the native Maoris, numbering

some 120,000, or 6 per cent of the total population, with whom European New Zealanders pakehas—live in friendship and on terms of equality.

This island country has a ruggedly beautiful coastline. Inland there are deep, swift rivers, which rush down from high mounand tains through the greenest of pastures where well-fed sheep and sleek cattle graze. New Zealand's highest mountain, Mount Cook, in South Island, pierces the clouds to rise 12,-349 feet above sea level. In North Island there are two famous active volcanoes, Ngauruhoe and Ruapehu. It is not wise to venture too close to them, for now and then they discharge sulfurous fumes, ashes and even great rocks and hot



NEW ZEALAND'S TWO ISLANDS



DIPPING SHEEP, NEAR MASTERTON

The sheep swim down a trough that contains a solution of chemicals to kill vermin, and they are thoroughly ducked en route. The scene is a large sheep station on North Island.



STALACTITES INCREDIBLY OLD

Stalactites and stalagmites merge in Aranui Cave, Waitomo, North Island. New Zealand is a geologist's paradise, with caves, hot lakes and thermal springs, volcanoes and geysers, lava. Tongariro, beautiful Mount Egmont, often likened to Japan's famed Fujiyama, together with Tarawera—all in North Island—are extinct or quiet volcanoes. Mount Tarawera erupted last in 1886, destroying many villages as well as the beautiful pink and white terraces that had been one of the world's wonders

In North Island is the world-famous Rotorua-Taupo area. This thermal region seems almost from another world. Freakish geysers shoot columns of steaming water into the air. The ground, vividly colored by minerals and in places hot and crumbling beneath the feet, is dotted with boiling springs and pools of hot mud. The Maoris living in the area have hot water for the asking at their back doors. They make good use of the hot pools for cooking and bathing.

The backbone of South Island is the Southern Alps, some of whose peaks are clad in eternal snow. On the west coast of this island are the famous glaciers called Franz Josef, Fox and Tasman, and wonderful flords that rival in beauty those of Norway.

Man-Made Forests of Foreign Trees

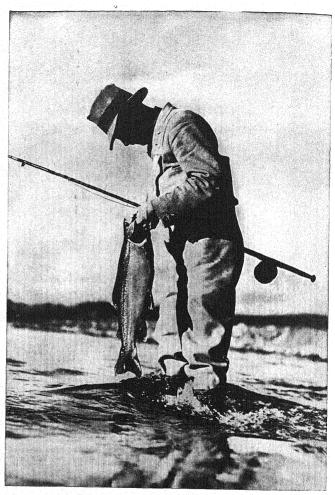
New Zealand has no less than fourteen million acres of native forest, much of it state-owned. An adequate balance is maintained between timber needs and the conservation of scenery, water and soil. Vast man-made forests of timber trees introduced into New Zealand grow to maturity twice as quickly as they do in their native countries. They are already producing a large portion of the country's timber, and will provide the raw materials for New Zealand's pulp and paper making industry, which is being developed.

The land is the source of almost all the country's wealth. The natural advantages of climate and soil, stimulated by specialized farming techniques and scientific aid, have boosted the productivity of farmlands to a remarkable level. With electrification and the use of machines for farm operations, production per farm worker is the highest in the world—twice that of Britain, and three times that of Canada or the United States.



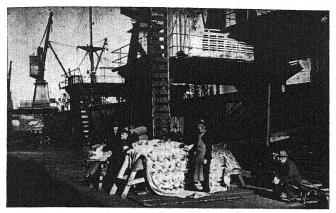
THIS IS THE WAY NEW ZEALAND FLAX GROWS

While European flax may grow to four or five feet, the New Zealand flax is gigantic. Long before the white man's coming, the Maoris made linen cloth; it is still a favorite textile.



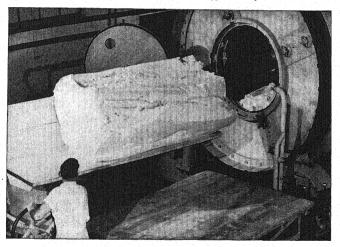
FISHERMAN'S LUCK-A RAINBOW BEAUTY

Trout are not native to New Zealand, but in 1868 some trout spawn were imported and the young fish liberated in streams. Later salmon were introduced. Now there is fine fishing.



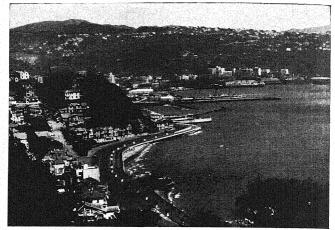
FOR DINNER TABLES HALFWAY ROUND THE WORLD

Meat constitutes about 20 per cent of New Zealand's exports, and most of it goes to Great Britain. Modern methods of refrigeration are a boon to shippers and importers alike.



NO BUTTER FINGERS IN THIS MACHINE AGE

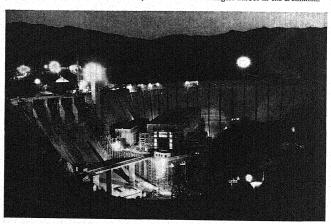
Annual butterfat production in New Zealand reaches about half a billion pounds, producing almost 200,000 tons of butter, besides quantities of cheese and other milk products.



WELLINGTON ON ORIENTAL BAY

WING GALLOWA

Wellington, on North Island, founded in 1840, was the first white settlement in New Zealand. It is situated on an inlet of Cook Strait, and commands the largest harbor in the Dominion.



POWER FROM RUNNING WATER

The Waikato River hydroelectric station, now completed, is one of a chain of stations that will add a million horse-power, trebling North Island's electrical production.

This small country is the world's biggest exporter of dairy produce, the second largest exporter of meat and the third largest exporter of wool. Butter, cheese and frozen meats fill the holds of the cargo ships bound for Britain. In a recent year, New Zealand was Britain's biggest supplier of dairy produce and meat.

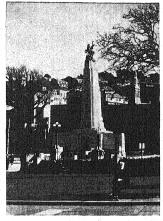
Cattle Graze All Year Round

Dairy farming in New Zealand is unique, in that it is almost entirely grassland farming and can be carried on throughout the year without winter housing of stock. Farmers have made a close study of this pastoral farming and have developed a highly efficient technique. To raise the standard of their products and to secure the greatest returns from their land, they have made full use of agricultural research. Cows on most farms are milked by electrically driven machines. The average dairy herd is thirty cows, and the average farm is forty-eight to sixty acres, worked by the farmer and his family with no hired labor.

Sheep farming is efficient and scientific. There are three types of sheep farmingwool-growing, breeding and fat stock farming (for meat), but they merge into one another and the general aim is the production of good meat and good wool from dual-purpose sheep. The productivity of New Zealand farming lands has a direct bearing on the British standard of living. A "Food for Britain" campaign has intensified production, and the farmers, always interested-and successfulin increasing output, have been making special efforts to step up the volume of exports to the United Kingdom. Tangible evidence of their success lies in the fact that New Zealand now supplies 40 per cent of Britain's butter imports, 53 per cent of her cheese imports and a good 30 per cent of her meat imports. Smaller primary industries cover a wide range, producing cereals, fruit, hops, tobacco

and flax, mainly for local needs.

In Westland and Southern Nelson, in South Island, are seams of the finest grade coal. At Greymouth and Westport there are large state-owned coal mines.



THE NATION REMEMBERS

The Cenotaph, in Wellington, erected to honor the New Zealanders who fought and died in World War I and who lie buried in foreign soil. The word "cenotaph" means empty tomb.

Since about 1935, manufacturing and other secondary industries have developed rapidly. Today, they employ one-third of the total labor force. In more than twenty thousand factories, the country processes almost all her own food, makes almost all her own clothing, boots and shoes, leather goods and furniture. Most heavy machinery is still imported, but there are well-established engineering works, iron and brass foundries, coachbuilding and motor-engineering works. Motor cars and trucks are assembled from imported parts. The manufacture of electrical goods, rubber goods, paint, glass, crockery and plastics is expanding rapidly.

Almost half of New Zealand's people live in cities of over 20,000 population, the largest of these being Auckland, in North Island, with 329,000. This city has grown rapidly in recent years. It offers a pleasant, warm climate, good beaches, and an excellent harbor for yachting. There are many beautiful



PLAYGROUND IN THE SKY

The Remarkable Mountains tower above Lake Wakatipu, South Island, offering a spacious play-ground to those who love to ski. Above, Coronet Peak (5,415 feet), one of the Remarkables.

homes, which perch on the hills or nestle in the bays, overlooking the harbor.

Nearly five hundred miles south of Auckland lies Wellington, the capital and seat of government. This city has a rugged beauty all its own and is set on one of the best land-locked harbors in the world, deep and wide enough to take the whole British fleet, if need be. Houses cling to the hills that lie behind the city. From the windows of many of these New Zealand homes, there are unsurpassed views of the harbor and city. A view of Wellington at night, with its myriad lights on harbor and hills, has been likened to night views of Hong Kong or Rio de Janeiro.

After crossing Cook Strait that divides North and South Islands and following the eastern coast of the latter for some distance, one arrives at Lyttelton, the port of Christchurch, now the second city in New Zealand. Christchurch is the chief manufacturing center of South Island. It is known as the most "English" city of the country. The pace of life is slower, and there is a restfulness about the tree-lined streets, the river Avon, with its weeping willows and grassy banks, the lovely churches, and attractive residential

suburbs with many gracious homes. For many English people it is the city in which they choose to live after retirement.

Farther south lies Dunedin, capital of Otago province and a university town, first settled by pioneers from Scotland.

The smaller towns have all the conveniences, on a lesser scale, of the cities, with well-paved streets, libraries, sports grounds and race courses. In most cases these smaller towns serve the surrounding farmlands.

The majority of New Zealand dwellings are bungalows, and most of the houses are wooden, though in parts of Auckland and in South Island one notices many brick and stone buildings. In 1951, nine houses were built for every 1,000 of population. The average number of people to every dwelling in the same year was 3,83.

An important factor in the rapid growth of secondary industries has been the development of hydroelectric power from New Zealand's ample water resources. It is the world's most electrified country, with 98 per cent of the homes supplied with electric power. The tremendous demand for power for industrial and domes-

SOUTH-SEA ISLAND NATION

tic purposes has made necessary an ambitious plan for the extension of the country's generating capacity. A chain of ten hydroelectric stations is being built along the Waikato River. When complete, this will generate more than a million horsepower. New stations are also being built in South Island.

Because of its mountains and many rivers, New Zealand has been a difficult country in which to build roads and rail-ways. Nevertheless, today it has well-developed road and rail systems that are being improved and extended continually to keep pace with the changing needs of modern transport. Owned and operated by the Government, the railway system of the country comprises a main trunk system through both islands, with cross-country lines feeding into it. The Government's policy now is to use electric locomotives as much as possible, and a general electrification program has begun.

There are 77,000 miles of roads and highways. Arterial roads—most of them

state highways—provide a fast and safe means of motoring between main centers of population. The modern trend in the design of these state highways is toward the "motorway," to provide safe high-speed travel. On a population basis New Zealand is one of the world's most motorized countries.

Air services link the cities and the main provincial towns. The country is also served by the main international air lines. Air-transport time from Britain is three and a half days, and from Australia eight hours. There is a daily flying-boat service between Wellington and Sydney, and Auckland and Sydney, and a land-plane service between Christchurch and Melbourne.

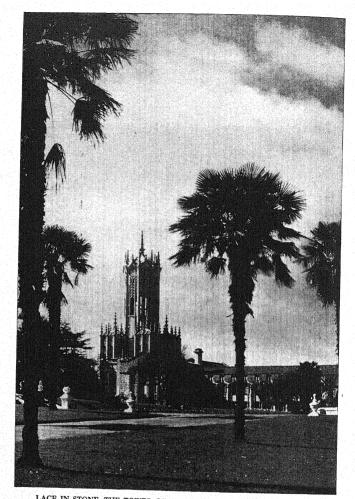
The Government owns and operates the postal services, the internal airways and the broadcasting service.

In the course of a century, New Zealanders have developed their own national and individual characteristics, but their outlook remains predominantly British.



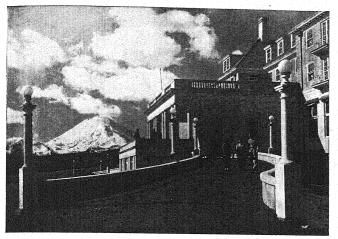
GRAND PARADE, JUNIOR STYLE

To the Agricultural and Pastoral Shows farmers bring their best stock and produce, and industries exhibit new models of all sorts. Young people have a part in the rodeos and other competitions.



LACE IN STONE, THE TOWER OF AUCKLAND UNIVERSITY COLLEGE

The graceful clock tower of Auckland University College presides over broad lawns shaded by palms and other trees. The college is a part of the University of New Zealand.



A VOLCANO OUTSIDE YOUR WINDOW

The Chateau, a hotel in Tongariro National Park, North Island, offers guests a remarkable view of Mount Ruapehu, a volcano more than nine thousand feet high. The park is in a volcanic area.

They refer to Britain as "home." The Maoris are friendly, hospitable, intelligent and adaptable descendants of the Polynesians, whose canoes were traversing the broad Pacific at a time when European seamen hesitated to venture far from sight of land. As a country, New Zealand is prosperous; it is a land of few extremes, and wealth is widely diffused.

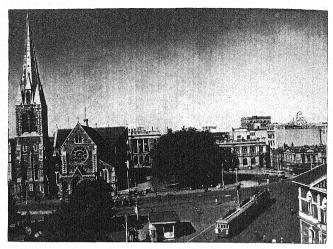
New Zealanders know they need more people in their country, both for its further development and for adequate defense. Through the Government's immigration scheme, several thousand Britons have already been brought to the country to live and work. When it is in full operation, the scheme will provide free or assisted passage for ten thousand new settlers each year. This scheme also provides for a limited number of families from other countries to come to New Zealand. An agreement with the Netherlands Government provides for the immigration of two thousand settlers from Holland annually.

On purely physical standards New Zea-

land has attained a high level. In the population of European descent, death and infant mortality rates are almost the lowest in the world, and the expectancy of life is among the longest. From the prenatal level to the care of the aged, the aim to establish conditions of life that will ensure good health is strongly evident. In the practical education of mothers and expectant mothers the Plunket system has done a tremendous amount of good. Originated in 1907 by the late Sir Truby King, this system has spread from New Zealand throughout the world.

Health standards are closely connected with social welfare, the keystone of which is the Social Security Act. This ensures economic security to all who cannot earn because of age, sickness, or unemployment. Family benefits, medical, hospital and maternity benefits are also paid.

There is no unemployment in the country; in fact, there is a large number of job vacancies. Membership in unions is compulsory, and the working week is of forty hours, spread over five days. New Zea-



THE CATHEDRAL SOUARE, CHRISTCHURCH

Christchurch, on the eastern side of South Island, is laid out around this square. The city was founded by a group of Anglican churchmen; and it is the see of the primate of New Zealand.

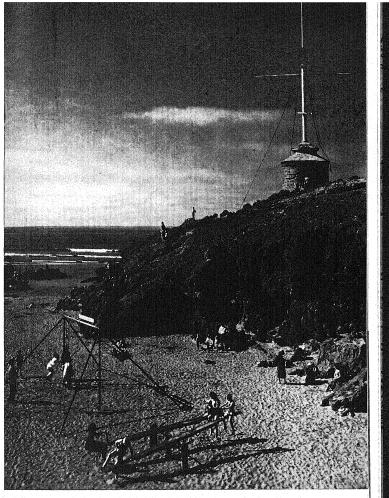
land was the first country to adopt the principle of compulsory arbitration in industrial disputes. Minimum rates of wages and other working conditions are embodied in laws that are enforced.

New Zealand has an excellent educational system. The state provides free education for all children up to the age of nineteen. Children must remain at school until they are fifteen. All state primary schools are co-educational, and so, too, are the technical colleges, teachers' training colleges and some of the secondary schools. The Free Kindergarten movement is making rapid progress. In her educational policy New Zealand has aimed at providing facilities giving country children the same educational opportunities as city pupils. For children living in remote places and for invalids, an efficient Correspondence School provides tuition in all grades; radio is often used, and the children miss little except association with their fellows. New Zealand has four university colleges, two agricultural colleges and five teachers' training colleges. Parents who prefer to send their children to private schools have a wide choice. Most of these private schools, primary and secondary, are under church supervision. Many of them have boarding facilities, and all are subject to regular inspection by the Education Department of the Government.

The formal link with Britain is the Crown, represented in New Zealand by a

governor-general.

New Zealand has its own legislature, or Parliament, which, until 1950, included a Legislative Council and a House of Representatives, the latter corresponding to the British House of Commons. The Legislative Council was abolished in December 1950. The House of Representatives has eighty members, elected every three years on universal adult franchise. Seventy-six members represent constituents of European descent and four are elected by Maori voters. The executive branch of the Government is headed by



RELAXING ON SUMNER BEACH, NEAR CHRISTCHURCH

No part of New Zealand is far from the sea. All the large cities are near the water, with fine sandy beaches within easy reach. The scene above is near Christchurch, South Island.

the Executive Council, comprising the governor-general and members of the Ministry.

There are two main political parties in New Zealand, the National Party and the Labor Party. The Labor Party Government was defeated in the General Election of 1949 after fourteen years of continuous office. The 1952 composition of the House was: National Party 50 seats, Labor Party 30 seats.

Women are eligible for election to the House of Representatives, and they take an active part in political affairs. The 1952 Parliament included three women, one of them a Maori representative, and

another a Minister of the Crown.

In no other part of the world is the incentive to play in the open air greater than it is in New Zealand. Sport plays an important part in the national life. Organized games are only part of the ordinary New Zealander's sporting interests. Nearness to mountains, lakes, rivers and beaches gives unlimited opportunities for the enjoyment of individual sports such as swimming, tramping, shooting, skiing, angling and yachting. New Zealanders take full advantage of these opportunities; the effect is reflected in their general health and fitness.

By N. E. Donovan

NEW ZEALAND: FACTS AND FIGURES

THE COUNTRY

A group of islands between the Tasman Sea and the South Pacific Ocean, 1,200 miles southeast of Australia; total area, 103,736 s.d. mi. In addition to the main islands, North (44,281 square miles) and South (58,003 square miles), there are a number of others—Stewart (670 square miles), Chatham Islands (372 square miles) and minor islands (320 square miles). The population, including Maoris, 1,939,703.

COVERNMENT

A sovereign state, it is a member of the Commonwealth of Nations. Executive authority is vested in a governor-general and an Executive Council, or Cabinet. The Cabinet, made up of a Prime Minister and 15 other ministers who represent the majority party in Parliament, carries on the government. Legislative power is vested in the House of Representatives; another chamber of Parliament, the Legislative Council, was abolished as of January 1, 1951. All adults, male and female, have the right to vote; Maoris have 4 seats in the House.

COMMERCE AND INDUSTRIES

Two-thirds of the land is suitable for farming and grazing. Principal crops are wheat, oats and barley. The country's principal industry is animal husbandry; livestock—4,723,000 cattle, 32,845,000 sheep—total of all kinds, 38,309,000 head; world's third largest producer of wool; one of the ten leading producers of meat. Leading manufactures are butter and cheese, preserved meats, clothing, prepared wood, auto bodies and parts, and iertilizers. Leading minerals are coal, gold, silver, silicon, serpentine, iron ore and petroleum. Chief exports are wool, butter, frozen meats, cheese, hides, skins and pelts. Imports include machinery, cotton piece goods, motor vehicles and parts, gasoline.

COMMUNICATIONS

Railway mileage in 1950 for North and South islands was 3,526, largely government-

owned. Total mileage of roads and highways is about 77,000. Regular domestic and international air service. The telegraph and telephone systems are government-owned; number of telephone subscribers, 257,034. Number of radio transmitting stations, 31.

RELIGION AND EDUCATION

There is no established or aided religion; Church of England predominates; numerous other faiths are represented. Education is compulsory for ages 7 to 15 and free for regular public courses. There are 2,200 public and private primary schools with 276,659 pupils; 269 secondary schools with 51,639 pupils. 4 university and 2 agricultural colleges comprise the University of New Zealand; with 5 normal colleges there is a total enrollment in higher education of about 12,500. There are also rural, mission, village, special and technical schools and numerous correspondence students.

POPULATION OF CHIEF CITIES

(Provisional figures from the 1951 census) Auckland, 328,995; Christchurch, 174,100; Wellington (capital), 133,416; Dunedin, 95,309; Hutt City, 74,855; Hamilton, 33,138; Palmerston North, 32,800; Invercargill, 31,600.

ISLANDS

Chatham Islands, consisting of Chatham and Pitt islands, are 335 miles east of Christchurch and are administered as a county. Population of about 700 is occupied mostly in animal husbandry. Stewart Island, part of Southland district, is separated from South Island by Foveaux Strait. It is a tourist resort. Principal among the minor islands within geographical limits are Kermadec Islands and Campbell Island.

Outer possessions include Cook Islands, Niue Island and the Tokelau group. New Zealand administers the Western Samoas under a UN trusteeship (for Facts and Figures on these

outlying territories see page 321).

THE MAORIS TODAY

New Zealand's Splendid Native People

In all too many areas where colonization has taken place in territory already inhabited by another and very different people, conflict has been the result. The relationship between the Maoris and the people of European descent in New Zealand is a shining exception. Here good neighbors live together on terms of nutual respect and complete equality. To be sure, the Maoris were already an advanced stock, highly gifted in the arts, before the Europeans ever came. Originally the Maoris, a Polynesian people, came from the central South Pacific islands, making the long voyage in outrigger cances.

THE Maori people of New Zealand have been described as the leading Polynesian stock of the Pacific. It is a distinction amply justified by their intelligence, which is reflected in a wide and interesting variety of highly developed arts and crafts, handed down and improved through the centuries. The Maori has also endowed New Zealand with a wealth of mythology, traditions and legends, history and poetry, forming a rich store of material and inspiration for the writers, artists and poets of today.

By their own efforts, guided by their own outstanding leaders, and with the assistance of New Zealanders of European descent, the Maoris have raised themselves to a state of equality in every sphere of Today there is less evidence of a color bar in New Zealand than in any other part of the world. Maori development in recent years is no longer a progress toward equality, but one toward a closer partnership with the Europeans. There has been a sharing of civic and national responsibility since 1852, when the Constitution Act gave Maoris the same voting rights as Europeans. The Maoris exercise fully their right to return four members of Parliament to represent them as a

In a population of 2,000,000 people, the Maoris number about 120,000, compared with 57,000 in 1921. The Maori birth rate has reached an average of 45 per 1,000, almost double that of the New Zealanders of European descent, and but for their higher death rate among children, the Maoris would be more numerous. If

the death and birth rates remain constant, there will be 547,000 Maoris by 2005; but there is every hope that they will number many more than that with the increasing number of Maori doctors, dentists, nurses and teachers working among their own people, and helping to break down the old reluctance to take advantage of modern treatment when ill.

The history of the Maori people in the last thousand years is marked by outstanding feats of navigation and seamanship across the vast spaces of the uncharted Pacific. A highly developed and closely knit tribal system, based on the family group, assured the Maoris of unity in times of danger or war. This system gave them courage, discipline and an ability to adapt themselves to new lands and conditions.

The discovery of Aotearoa (Long White Cloud), as New Zealand was named by the first Maori navigator, is attributed to their hero Kupe, who made one of the world's great sea voyages in a sturdy outrigger. He came to New Zealand by holding "a course to the left of the setting sun" according to Maori lore. When he reached the country, he sailed around both North and South Islands, giving to capes and bays and other features along the coast names that survive to this day. Kupe was followed 200 years later by Toi of Tahiti, using the sailing directions left by Kupe; and 600 years later by Captain Cook, who sailed around both islands in the same manner as Kupe had done, although at the time Captain Cook did not know of the great Maori sailor who had preceded him by several centuries. It was in the four-

THE MAORIS TODAY

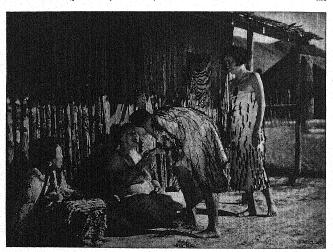
teenth century that the main Maori migration to New Zealand took place.

Scientists who study races and their cultures believe that the Maoris came to New Zealand from Hawaiki, subsequently identified as Raiatea, in the Society Islands. The history and migrations of the Maoris and their settlement of the island groups of the central and eastern Pacific are given in the late Sir Peter Buck's book, THE VIKINGS OF THE SUNRISE. Sir Peter, director of the Bishop Museum in Honolulu at the time of his death, late in 1951, and himself half Maori, was the best-qualified person to disentangle history from myth in the lore of his people, which was handed down only by word of mouth. He said that the Maoris entered the Pacific from somewhere in the Malay Archipelago, moving south by way of the Micronesian Islands, to the Caroline and Marshall groups, from where they spread: northeast to the Sandwich (present-day Hawaiian)

Islands; south to Samoa; southeast to the Society Islands; and then to New Zealand by way of the Cook Islands. Sir Peter came to the conclusion that the settlement of the group of islands in central Polynesia took place about the fifth century A.D.

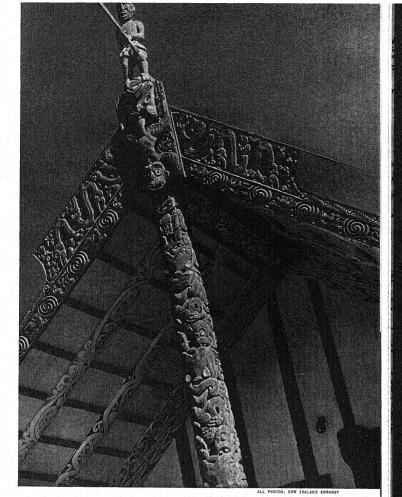
Speaking on the origin of the Maoris, Sir Peter stated that in remote ages the ancestors of the Polynesians probably lived in some part of India, and worked east, but myths and legends do not reach back that

"They must have sojourned in Indonesia in order to reach the Pacific: the Polynesian language has affinities with Indonesian dialects," he said. "When the pressure of Mongoloid peoples, pouring in from the mainland, became oppressive, the Polynesian ancestors turned their gaze towards the eastern horizons, and embarked upon one of the greatest of all adventures." The same pressure of population, and also dissatisfaction with the



A KISS BY ANOTHER NAME

The Maori salutation, or welcome, is called "Hongi." It consists of a handclasp and touching of noses. These women of North Island have bobbed hair in the European manner.



THE ANCIENT ART OF WOOD CARVING

The center pole of the entrance to this Maori meeting house suggests, in its carving, the Indian totem poles. Most Maori patterns are in curves, straight lines being rare.



THE MEETING HOUSE AT GISBORNE

The Maori pa, or village, is usually built facing the marae, the open grassy space in front of the meeting house. Most meeting houses have a large social hall and kitchen attached.



THE SOLEMN CEREMONY OF TATTOOING

"Tattoo" (tatu) is a Polynesian word. The custom of tattooing, once widespread among the Polynesian peoples, is on the decline now. The Maoris developed the art to a high degree.

social order in the islands of the Pacific, led to the last great migration, which took the emigrants to New Zealand. By the time this happened, "Long White Cloud" was more than a legend to the Maori people. Kupe's discovery had been rediscovered, and the Maoris had all the necessary information to steer them to "the land full of birds," as Kupe put it.

The Little Fleet of Eight Canoes

The migratory party, with supplies of food, food plants, and seeds, set sail about 1350 A.D., in eight big outrigger cances bearing the historic names of Tainui, Arawa, Takitimu, Aotea, Mataatua, Kurahaupo, Tokomaru and Horouta. Maoris today, as in the past, trace their descent to an ancestor who came in one of these cances. "Coming over in the cance" is to the Maori what "coming over in the Mayflower" is to Americans.

So the Maori settlement of New Zealand began. In South Island the new arrivals found the remnants of a race called the Moriori. These people, according to legend, had come to New Zealand in the last of a series of migratory waves from the Pacific Islands that had begun in the eighth century. This legend is supported by the fact that the Morioris also understood navigation. When the Morioris finally had to make way for the more vigorous Maori newcomers, they migrated to the Chatham Islands, some five hundred miles east of New Zealand. The last fullblooded Moriori died there about 1920; but some hundreds of Moriori descendants, partly of Maori or European stock, still live in the Chathams, where the main occupations are sheep-farming and fishing.

The Maori's settlement of New Zealand, looked at from any angle, was an outstanding success. He overcame all his formidable initial difficulties—a land vastly bigger than his previous island home; a colder climate, in which the kumara (sweet potato) was the only one of the many island food plants he brought with him that survived; and a climate that demanded much warmer clothing and housing.

The Maori prospered and multiplied.

The nineteenth century saw the beginning

of European settlement in New Zealand, but it was not until 1840 that ordered government was constituted. This followed the Treaty of Waitangi, under which New Zealand became a Crown Colony of Britain. The treaty was signed by Lieutenant-Governor Captain Hobson, representing the British Government, and by a majority of the Maori chiefs.

The Treaty of Waitangi comprises three short articles. In the first, the Maoris ceded "all rights and powers of sover-eignty" to Queen Victoria. In the second, the Queen confirmed the chiefs and their families "in full, exclusive, and undisturbed possession of their lands and estates, forests, fisheries and other properties." However, the chiefs had to yield to the Crown the exclusive right of purchase over such lands as the proprietors were disposed to transfer. In the third article, the Queen gave to the Maoris all the rights and privileges of British subjects.

The Maori people have always been grateful for British protection and they are proud to be British subjects. During the

PIPING HOT WATER, BUT NO PIPES

Nature supplies the hot water for this young man's daily bath in the lake near his home. Around Rotorua, North Island, there are many hot-water pools and lakes and geysers.



second World War, their leader, the late Sir Apirana Ngata expressed that feeling

when he declared:

"The protection enjoyed under the British flag was something no other nation could offer its peoples. Our war effort has been prompted by a full appreciation of the democratic principles, and by a desire to uphold the British Crown and Commonwealth and institutions, which guaranteed to all native peoples incorporated in the Empire, just and democratic treatment, such as native populations under other governments marvel at. have failed to help at a time when the Empire and its principles were in deadly peril would have been an act of baseness. However, no one can accuse the Maori people of having failed in their duty."

Young Maoris to the Rescue

For fifty years after the arrival of the Europeans, the Maori population gradually decreased. A band of Maori intellectuals, known as the Young Maori Party, waged a battle for racial survival. They were led by Ngata, who had obtained the degrees of Master of Arts and Bachelor of Laws -he was the first member of his race to graduate. It was due to the devoted efforts of the Young Maoris that the decline in population was arrested. But the fight was uphill all the way. The battle was for better physical health, for improved educational opportunity, for understanding of the pakeha's (European's) way of life and adjustment of the Maori to it. The Maori moral code and age-old customs had to be adapted to Western civilization. The spiritual life of the race had to be refreshed and deepened. At the turn of the century, there began an astonishing resurgence, possibly without parallel in modern times.

This spectacular rise in the Maori population brought an economic problem—the problem of assuring a livelihood to the thousands of young Maori men and women of the present and future generations. No longer was the three million acres of reasonably good land, which was all that remained of the Maori ancestral holdings, able to maintain such a population.

More and more the young Maori had to

seek a livelihood in the professions and industries of the cities and towns. This movement, which first became pronounced during the years of the first World War, presently received a new impetus as the result of an enlightened government policy. The keystone of this wise policy was the absence of racial barriers in the way of the Maori.

Today, Maori doctors, dentists, lawyers, accountants, school teachers (both men and women), nurses and dental nurses, skilled tradesmen and other Maori workers are playing a prominent part in New Zealand's economic and industrial life.

Two important government departments are administered by Maoris—one of them the Department of Maori Affairs, which is responsible for the vast development

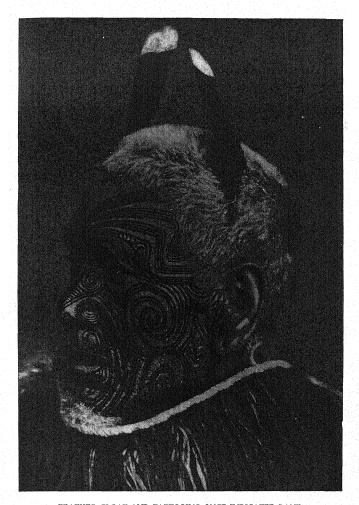
schemes of Maori-owned lands.

The whole field of education, from kindergarten to university, is now open to the Maori on exactly the same liberal terms as are enjoyed by the rest of the population. Much progress has been made in improving the standards of Maori housing and health.

Helping Maoris on the Land

All avenues of government employment, as well as private employment, are open to Maoris. There have been spectacular advances by which big areas of Maoriowned land lying fallow or underdeveloped for many years have been brought into production. The successful development scheme was initiated in 1929 by Sir Apirana Ngata, the most able administrator the Maori race has produced. In his capacity as Minister of Maori Affairs, he drafted legislation that laid the cornerstone for the enterprise which is today so lucrative for the Maori owners. The lands chosen for development are at first administered by the Department of Maori Affairs. During the development period, young Maoris are trained to be farmers, and when the land is ready these young men take it over.

Other Maori leaders who contributed to the renaissance of the race include the late Sir James Carroll, member of Parliament, and minister of the Crown; Sir



FEATHER CLOAK AND TATTOOING ONCE INDICATED RANK

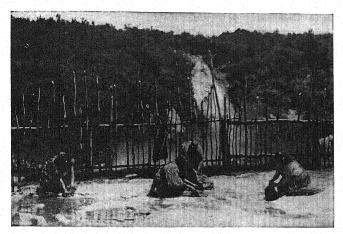
The modern Maori chieftain no longer wears the traditional garb, a feathered cloak, nor is his face tattooed. He is a university man, trained for leadership in today's complex world.



PAPAKURA GEYSER, "A VOLCANO OF WATER"

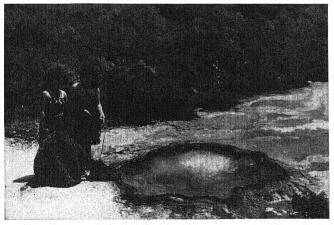
At Whakarewarewa, North Island, geysers eject columns of water and steam at fixed intervals, to the accompaniment of underground rumblings or sharp reports. Papakura geyser is awe-inspiring.

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A COMMUNITY LAUNDRY IN THE OPEN AIR

In the hot springs area of North Island, some pools and lakes are used for washing and different ones for cooking. There are pools of varying degrees of warmth in this astonishing district.



ONE OF MOTHER NATURE'S COOKSTOVES

Yes, you can make a fricassee or cook cereal in this outdoor pool at Whakarewarewa. In past stages this whole area was a mass of spouting volcanoes. The activity has by no means died.



TRADITIONAL BEAUTY

Maori wood carving is a craft that has been handed down from father to son for generations. The work is done by hand, with slow and loving care. The art is encouraged by the Government.

Maui Pomare, the first Maori to become a doctor of medicine, and who later became Minister of Health; the late Sir Peter Buck, who represented the Maori race on the Executive Council, and was Director of Maori Hygiene, and later director of the Bishop Museum, in Honolulu. These men, and many others, spurred the race to effort after a period of decline that many thought would extinguish the Maori race forever.

These leaders were also conscious of their duties to the nation as a whole, as were their people. The Maori batallions raised to fight in two world wars were made up of volunteers, and their courage and enterprise on all the battlefields on which they fought is a cherished and glorious part of New Zealand's military record. The Maori, sensible of the reputation of his warrior ancestors, and displaying an inherent instinct for military tactics and strategy, covered himself with glory. One of them was the youthful Te Moana-Nuia-kiwa-Ngarimu, a second lieutenant in the infantry. He won the Victoria Cross for outstanding leadership and courage in leading several charges against German positions in Tunisia, until he fell at

the head of the last charge, which he commanded although already severely wounded.

The resurgence developed under the aegis of Ngata, Buck, Pomare and Carroll goes on uninterrupted. The preservation of Maori culture has manifested itself in the erection of many of the finely carved traditional meeting-houses, in a renewed interest in the arts and crafts and in the Maori language. In this work many New Zealanders of European descent are actively interested; and the Government has spent considerable sums of money to help the Maori race revive its culture.

There is much still to be done in this direction, but the main social and political obstacles, which would have made a cultural renaissance impossible, have long been removed. All the people of New Zealand may take pride in this achievement, by which a rich heritage has been preserved and is being fostered. The whole of the Maori outlook today is one of high hope and confidence.

By George Bryant



EDUCATION FOR TOMORROW

Maori youth are being educated in the sciences to take their place in the atomic age. Practically all Maori children and young people go to school, with European classmates.

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